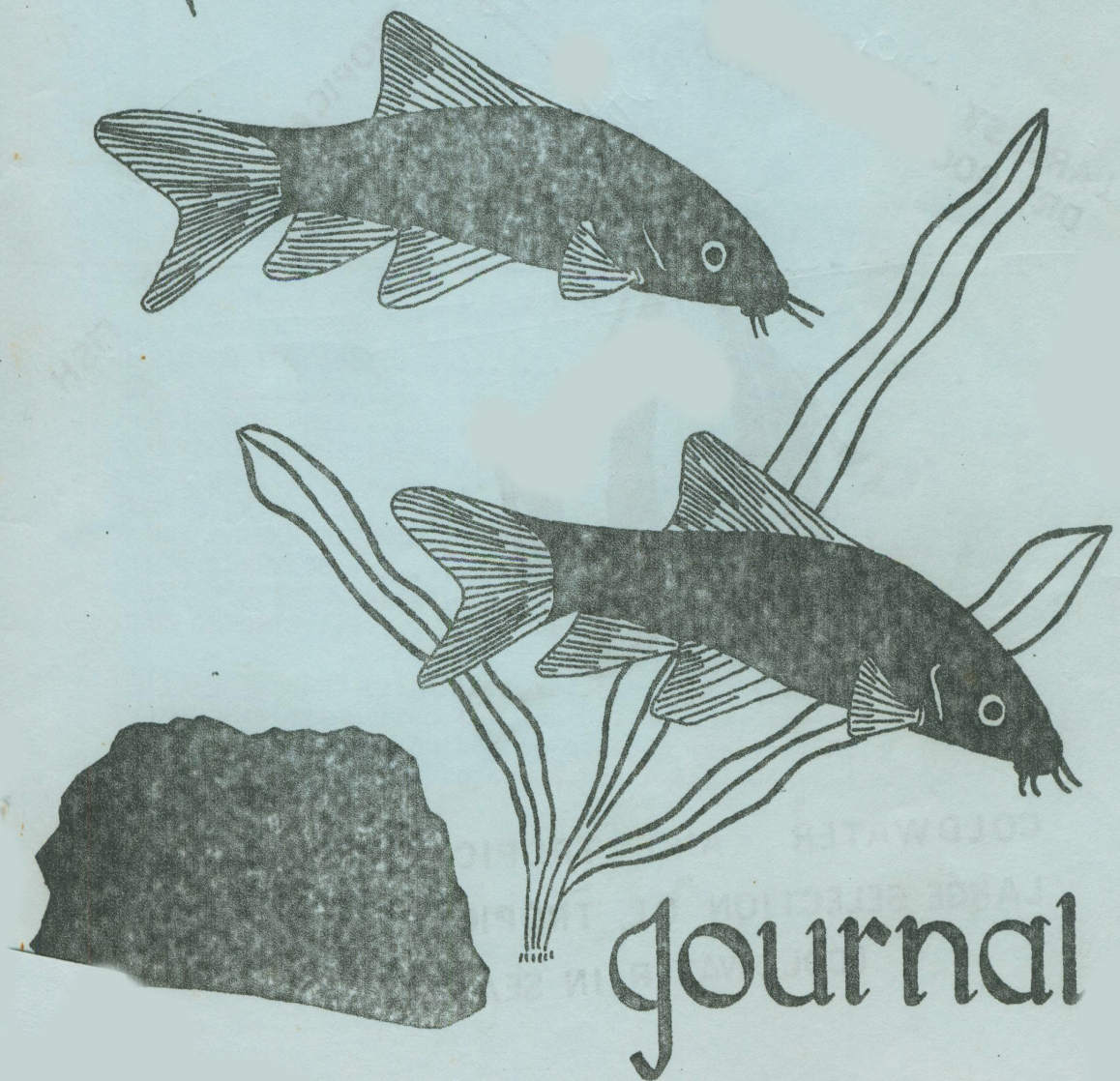


Southend, Leigh and District Aquarist Society



SOUTHEND, LEIGH AND DISTRICT AQUARIST SOCIETY
(Founded 1935 or before)

Meetings are held on the 1st and 3rd Tuesday of every month; the meeting commences at 8.30 p.m.

Venue:-

**ST. ANDREWS HALL,
ELECTRIC AVENUE,
WESTCLIFF-ON-SEA,
ESSEX.**
(entrance in South View Drive)

BI-MONTHLY JOURNAL
No. 83. DECEMBER 1980 - FEBRUARY 1981.

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OPEN SHOW SECRETARY.

JIM LONDON (AS ABOVE).

EDITORIAL.

As it happens the club does not have a magazine-editor -as such this year's ^as jibody fancies to try his hand (Cowards) at the job and as I did it last year, I will continue- until some unsuspecting-fool can be landed with sorting it out. To be .honest its .very easy especially when there are plenty of articles around.

To kick off with this year there are - a couple of articles by ex Mag Editor Peter Capon (a very prolific .writer is Peter). Dave Burges on how to make a mess of the P.R.O's. job (Kidding aside Dave does a good job). About their-pond by Dave & Marjorie, Frogs, again by Dave Holliday. Jim LONDON'S method of Open Show preparation and all those club results that we thought nobody bothered to read anyway.

By the time this Magazine appears the new club card should be ready. Members are reminded that all table shows are listed on the card as well as whats on during the evening. As table show entries are increasing recently I am well pleased as Table Show Secretary is my committee post anyway. There were 19 entries in the recent Senior Characin class, even more than were entered in the members challenge, in which I was rather disappointed in the rather low number of entries this year. As this is the Prime Competition for which members should aim to win being classed as probably the MAJOR TABLE SHOW put on by the Club. I seem to remember there used to be as many as fifty entries a year a about the time I joined the club eight years ago. So lets see everyone have ago next year..

As ever more articles are needed to keep the-magazine in publication. I have been promised articles by Terry Waller of East London, he who won the prize for best article last year, I am informed he has been working on another just as good so lets try and keep any prize given this year in our own club. I have a couple of articles lined up by Peter Capon and one by Dave Burges on breeding Angels. So things at the moment look okay but I still want to see more articles.

How about a few laugh lines for the magazines. Using a fishy name or phrase, write a funny pun or two and make us laugh the best will get the next two mags free. So have a go and make us laugh.

TERRY BLACKMORE ACTING EDITOR.

3.

Presidents Notes

Dave Cheswright

It is good to hear that Members have been able to supply our Editor with enough copy to keep the Journal going, after a longish gap in publication. I will continue my Livebearer Articles in the next issue as Terry said that he had enough copy for this one. However, please keep your copy rolling in, as he has another 5 issues to cover this year after the one you are reading now..

The new Fish House has been going for a Year now and we are very pleased with it. I have only just got rid of the last leaking tank — there were about 8 leakers when we moved the ancient ones last year—fiwt they were beyond repair. Plants are growing well in the new Fish-house and have got through the Winter darkness at least as well, as they did in the old shed in spite of the fact that only 50% of the roof lets in the natural light. The Livebearers are breeding in large numbers and the killie fishes are breeding well when Chris is at home..Then he collects eggs which I have to see to while he is away allegedly studying for his exams!! (The number of unknown beer mats which arrive when he comes home at intervals seems to indicate other interests).

Our new Committee is one of the keenest we have had for some Years. Please give them your support, particularly in helping and entering the Open Show on Saturday, 2nd May, 1981. Workers are required on the Friday evening as well as on the actual day.. A lot of work by our Show Sec, Jim London and by Ray Stanford goes into organising the show but, without members to work and without fishes, etc. entered we will not be giving them our support. I hope everyone will put in 2 or 3 entries as this gives the initial boost needed to ensure good support. The Draw is the main financial item and, unless great numbers of tickets are sold, the Show will make a Loss. Please sell as many as you can before the day of the Show.

We have joined the new Group of Aquarist. societies in East. London and Essex and they have plans for a Dance, possibly a Convention and a publicity display at the Essex Show. our Secretary will inform members of these events when exact details are available.

The Open Show season starts on 28th March with the Croydon Golden Jubilee Show at which a few of our members will be seen.. I am writing this before that date so a report will not be available until the next Journal. A List of Open Shows is on the board at our meetings and I, for one, would like to see more Southend members attending these.

Tony Cooper hopes to arrange a Coach trip to Diss, Norfolk, in September, to visit the Open Show there, the local /ish farm (mainly coldwater) and possibly the Bressingham gardens, etc. He is also booking a Dance for October. Please support both these Social events.

A CUCKOO IN THE TANK.

PETER CAPON.

Amongst our aquarium fishes perhaps the family exhibiting the greatest level of parental care are members of the Cichlidae. Many of the cichlids even carry this parental care to the extreme of carrying the eggs and fry about in the relative safety of their mouths. The brooding parent will then allow the fry out of its mouth to feed whilst remaining on guard against possible predators. When danger threatens the parent will signal to the fry by jerking movements of the fins and in some cases by sounds upon which the fry will crowd back into the parent's mouth. As the fry grow the parent becomes less able to accommodate the evergrowing off-spring and they become less susceptible to the warnings until this strong association ends.

The group of cichlids where this type of parental care is most common is with the Rift Valley Cichlids, in these fishes it is almost always the female that carries out the mouth-brooding.

A.J. Ribbink of Rhodes University was diving in Lake Malawi when he noticed that many broods of cichlids appeared to contain a mixture of species, some of the individual fry were obviously of the same species as the mother whilst others were of a totally different species. A Cuckoo fish was obviously to blame. He was able, over a ten day study period to discover that in his diving area there were three different species guarding mixed broods, and he was unable to find a single mono-specific brood.

A mixed brood was caught, reared and eventually identified as *Haplochromis chrysonotus*. A difficulty now arises since *H. chrysonotus* is a surface living plankton feeder whilst the foster parents are all predators that live on the bottom. The female *chrysonotus* has to find a foster mother whose own young are at a similar size and development stage and release her fry amongst them. Once the fry are mixed the foster parent would find it almost impossible to separate hers from the Foster fry, all the fry respond to her recall signals and she is programmed not to eat fry that obey her instructions. It is possible that the fry are not mixed but that the eggs are, but this poses problems for the *H. chrysonotus* in that the pair of foster parents, the male in particular, would surely drive off any interlopers, during the actual spawning.

A problem with the cuckoo fry is that usually fry tend to identify with the species that raises them, that is to say they normally only attempt to mate with the same species as their mother. Yet *H. chrysonotus* appears to breed true either this identification, or imprinting takes place before the fry are fostered out or the fry are resistant to imprinting as we know it. It is also strange that the foster species do not appear to have evolved a defence against the attentions of the cuckoo. At least the Cuckoo fish does not seem to actively destroy its.....

continued on page 7.

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OUR POND.

DAVE & MARJORIE.

Well spring is getting nearer, so I went to have a at our pond. Although it is a small pond it supports three red Gold Fish aprox 3½ inches in length and during the summer newts and ,frogs.

The pond is sited in one corner of the garden, corner ways. Behind this is the rockery. At one corner is a small growing Conifer.

Coming, round the front is the lawn, but this does not go right up to .the pond. I have put a small 18" crazy paving .strip,

The other end I have sunk a plastic bowl, just below the soil level. In this I have planted some marginal plants.

It is now the end of February and the plants round the pond are just coming into flower. These being yellow and blue Crocus and Snowdrops.

On the rockery ve have in flower blue rockery Anomes,, Rockery Irises are up but not in flower, as are the red Tulips, these are just opening. This looks a picture when everything is out. Although I have been told the pond is to small but when you have a small garden you put in what you can. Anyway we get immense pleasure from it, and we hope to spawn some fish this year.

Since writing this I have already noticed the presence of two frogs. The date being 22nd February and very cold with frost.

=====

PUBLIC RELATIONS OFFICER.

DAVE BURGES:. :

As this is my second year as P.R.O. in your club. It-must be over due for me to write in the Journal about my job. It is reasonably straight forward. Bringing the case with books, air line and show tanks in it and hoping to sell some articles to make it lighter to carry home. I also welcome new members and try to help them enjoy their first visit to the club. Give them membership forms and program cards and rules, and then introduce them to other members with similar interests where possible.

Another part of the job is to send get well cards to members that unfortunately fall ill. With this part of the job I could sometimes do with your help. If you know a fellow member that is ill, or his wife or child etc, I would be grateful if you would let me know his or her name and address so I can send a card. I cannot send cards to people if I am unaware they are ill.

If you know of any member who has not been to recent meetings I would also like to hear of this also. Then we could find out why and get them attending again.

I hear at committe meetings that membership is slightly down this year so if you know someone who might be interested in our club, bring them along. There is no obligation to join the first night.

Finally if you have any ideas on improving the club I or any other cdmmitte member would be pleased to hear from you

I look forward to seeing you and any new members at future

A WAY OF EXHIBITING AT OPEN SHOWS.

JIM LONDON.

Three days before exhibiting fish at an Open Show choose the number of tanks needed rejecting any that are scatched or cracked. Place these tanks upside down on a bench or table and paint the bases matt black.

The next day wash all the tanks with soapy water and then rinse them thoroughly to remove all traces of soap and to ensure that they are sparkling clean. The tanks are then placed in a clean Polystyrene box, so that they remain clean until the day of the open show.

The day before the Open Show, three nets, three battery pumps, two syphon tubes, one $\frac{3}{4}$ " and one $\frac{1}{8}$ ", a thermometer, some plastic bags, elastic bands, a small jug and two clean fluff free cloths are packed into a second polystyrene box.

On the day of the show, the two polystyrene boxes are packed into the car. Lastly catch the fish. The best method is to catch them immediately after the light in the fish house has been switched on. The fish are then put into one of the polystyrene boxes in the car. Make sure of the Show Schedule.

After arriving at the Fish Show, obtain the entry form from the Show Secretary which had been sent by post the previous Monday. The rest is easy.

Part two will show you how in the next edition of the Journal.

(Jim does not mention show tank covers dont forget to take these along with you as they are very important. EDITOR).

FROGS SURPRISE.

DAVE HOLLIDAY.

To any Gardener it is well known that Broad Beans mostly get planted in October. This helps them to over come the Black Fly problem. Well I was late in planting mine, early February being the time.

In the garden I had a plastic bag of Horse Manure. So I though I would dig some in at the same time as planting the beans

As I opened the bag I saw something move, on looking closely I was amazed to find a large full grown frog. It had been there all winter. I wonder if any one else has found an unusual place for frogs to hibernate.

A CUCKOO IN THE TANK. continued from page 5

adopted siblings although of course it may do so through greater competition for food.

Readers wishing for further information on this fish with it's unusual breeding system will find the original article in Nature Volume 267 p 243.

**JAWS OF YESTERYEAR
or PREHISTORIC.. SHARKS.**

PETER CAPON.

Towards the end of last year Dr. Richard Lund's fish palaeontologist at Adelphi University Garden City, New York presented the results of his investigations into a new and important fish fossils that he had discovered. He reported his finds to the Society of Vertebrate Palaeontology at Boulder, Colorado.

Dr. Lund and a party of students has been unearthing a series of fossil sharks in soft limestone at Bear Gulch, Montana. The limestone deposits date from the Carboniferous Period; about three thousand million years ago, when a warm shallow sea stretched across Western North America, this sea was about six hundred miles at its widest.

The fossils are very well preserved and it is thought that high sedimentation rates must have buried the fishes before their bodies could decay or be broken up by water currents. There is a profusion of remarkably intact specimens; in several of the fossils it is possible to discern the small shrimps that formed the fishes' last meal. Even some of the gill filaments, are preserved along with blood vessels, liver and intestines. The preservation of gill filaments is rare in fossil sharks and examination of these has raised doubts about early shark structures, our modern sharks are classified as Elasmobranchs that is, each individual gill filament has its own discrete opening to the surrounding water. Present day sharks usually have seven such gill slits on each side of the head. However the fossil sharks at Bear Gulch have only one opening on each side of the head. The only known cartilaginous fishes with only one operculum on each side are the Chimaerids. The Chimaerids common name Rabbit Fish, are a large headed creature with a body that tapers almost to a point at the tail, the largest of these fishes *Chimaera affinis* grows to three feet and is to be found at depths in the Atlantic.

The fossils represent a group of fishes ranging from Chimaerids and Chimaerid-like sharks through to the true sharks. This finding has led Dr. Lund to propose that the sharks and Chimaerids be grouped together as the Chondrichthyes, being a group of fishes with cartilaginous skeletons. It would appear that these fishes were the first vertebrates to evolve with such a diverse range of types to be able to fill all the available biological niches.

Dr. Lund found fossils of sixty-four species of shark many of which were only known until now from teeth, spines and dermal denticles that are occasionally found in Devonian deposits. Dermal denticles are placoid scales with an hard base and a backward facing spine. This is the first time that complete fossil specimens have been found.

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One of the more unusual methods of identification has been by pigmentation, indeed, one or two species can only be differentiated by this means. The original colours have, of course, gone but the black pigments have proven to be remarkably stable and they are easily seen in contrast as they are with the light brown fine grained rocks.

The largest fossil shark to be found is one four foot long creature with it's dorsal fin hinged to form a kind of rudder. This unusual fin is likely to have made the shark far more manoeuvrable than any of it's modern cousins. The other fossils found are closer to a foot long, on average. Many have large crushing tooth plates indicating a diet of hard shelled organisms, possibly similar to clams. They have broad heads whilst their bodies taper considerably to the rear, rather like the modern Chimaerids which feed on invertebrates on the sea floor.

The lower older strata contains the Chimaerid-like sharks whilst the younger strata contain fossils more like our modern sharks. Dr. Lund suggests, however, that they were not the direct forebears of our modern sharks.

Many species exhibit sexual dimorphism which has made identification difficult. In many cases Dr. Lund likens the sex differences to those of deer since the males of a number of these sharks are equipped with "antlers" whilst the females lack these appendages. Some of the male organs are described as "grotesque" groups of species has a horn which starts behind the head and then bends forward over the head so that it's tip is above and level with the snout. These latter fishes have received the nickname of "Unicorn Fish".

There is a type with a pair of clasping organs on the snout, these resemble the claws of a crab yet the fish still retains the more usual ventral claspers formed from the pelvic fins still in evidence in modern sharks. Again the resemblance to modern Chimaerids is in evidence here in that the Chimaerid has a clasper which is housed in a groove in it's forehead.

There are sharks with enlarged fins which may have very well have been the prehistoric equivalent of our own flying fishes. Also found were flattened bottom dwelling sharks akin the present day plaice and sole. There was even one species that was adult at barely one inch long.

The fossils date from the age when sharks were supreme and filled every available ecological niche which today are occupied by the Teleostei or bony fishes. From being the rulers of the waters the sharks now, whilst still being extremely efficient creature, only remain as predators. What happened ?

Dr. Lund suggests that they were not hounded into extinction by the bony fishes, since they had existed for forty million years and could hardly be thought of as biologically inefficient. He suggests that the profound climatic change that occurred towards the end of the Palaeozoic period led to their demise. It was only with the dawn of the Mesozoic age with it's improved climatic conditions that the better adapted shark predators and, indeed, the bony fishes started to evolve and take over the waters.

CLUB REPORTS.

2nd DECEMBER. 1980.

A.G.M. tonight, with quite a lot to get through it always means a late finish. Firstly various reports were read by the President, Treasurer, etc. . The meeting decided that subscriptions should be raised by £1 for seniors, 50p for Juniors and O.A.P.s .The following were elected to form the committee.

PRESIDENT.	DAVE CHESWRIGHT
VICE PRESIDENT.	DAVE HOLLIDAY.
HON SECRETARY.	BERT FARROW
HON TREASURER.	JOAN FARROW.
MAGAZINE EDITOR.	NO APPLICANT (Terry Blackmore meanwhile will edit magazine)

TABLE SHOW SECRETARY. ,	TERRY BLACKMORE.
ASSISTANT EDITOR.	PAUL BOORE.
P.R.O.	DAVE BURGES.
LIBRARIAN.	KAREN TURNER
SOCIAL-SECRETARY.	TONY COOPER.
CATERING SECRETARY.	AUDREY CHESWRIGHT.
GEN' COMMITTEE MEMBER,	JIM LONDON.
OPEN SHOW SECRETARY.	JIM LONDON.(POST. ELECTED MAY 80)

The post .of Assitant Librarian ceases to exist and a new position of Catering and Refreshment Secretary was adopted to make things easier for the Social Secretary.

RAFFLE PRIZES.

DAVE HOLLIDAY. ..' SALT & PEPPER SET. PETER CAPON •SCENTED. SOAP
TONY COOPER KITCHEN ROLL & HOLDER. PAUL BOORE 'TALC.

TABLE SHOW RESULTS..

CLASS HARD LUCK SENIOR. 4 ENTRIES JUDGE:- TERRY WALLER

1st. TONY COOPER.	GLOWLIGHT TETRA.	74 POINTS.
2nd. .KAREN TURNER.	C. AENUS ALBINO	69 POINTS
3rd.' Mrs WHITE .	A. RAMIREZI .	60 POINTS
4th. MR WHITE.	SERPAE TETRA.	53½POINTS.

CLASS- HARD LUCK JUNIOR. NIL ENTRIES.

No juniors were eligible as they all managed to win at least one class during the year. Tony Cooper cannot enter next years hard luck having won this years.

.ROSE BOWL 1980. (FINAL POSITIONS).

1. S. BOORE	80 POINTS	15. J. WIMBUSH.	16 POINTS.
2. R. DAVIS	75 POINTS	16 E. BYATT.	16 POINTS.
3. J. WOOD	45 POINTS	17. A. MOLES.	13 POINTS
4. T. GILBEY.	39 POINTS.	18 A. FARROW.	13 POINTS.
5. L. SOMNER.	36 POINTS	19. K. TURNER.	9 POINTS.
6. P. RASHBROOK.	35 POINTS	20. D. HOLLIDAY.	8 POINTS.
7. R. PEARMAN.	32 POINTS	21. R. SMITH.	6 POINTS.
8. D. BURGES.	26 POINTS	22. C. CHESWRIGHT.'-	3 POINTS.
9. R. CROW.	24 POINTS	L. BELL.	3 POINTS.
10. D. CHESWRIGHT	22 POINTS.	24. J. PATON.	2 POINTS.
11 P.BOORE	21 POINTS	MRS WHITE.	2 POINTS.
12 MRS PERRY	20 POINTS	26. A. SWINSCOE.	1 POINT.
12 R. NEAL	20 POINTS	N. LEVERS.	1 POINT.
14 A. COOPER	17 POINTS	M. CANE.	1 POINT.
		MR. WHITE.	1 POINT.

TROPHY WINNERS 1980.

DUBOISSON CUP	BEST CHARACIN	TONY MOLES
LEN WILLIS CUP	BEST KILLIFISH	ERIC BYATT
STAN HYDE 'CUP.	BEST CORYDORAS-BROCHIS	SEAN BOORE.
WINDERMERE CUP.	BEST MARINE.	NO CLASS
S.L.A.D.A.S. 4.	BEST COLD WATER.	R. CROW.
SAUNDERS CUP.	BEST COLDWATER runner up	R. CROW.
BARNES-0ARE CUP.	BEST Xb-m EGGLAYERS.	DAVE BURGES
CORONATION CUP.	BEST Xo-t LIVEBEARERS.	RON DAVIS.
S.L.A.D.A.S. 1.	BEST A.O.S. EGG LAYER	MRS PERRY
S.L.A.D.A.S. 2.	BEST PLANT,	TERRY GILBEY
GILES CUP.	HOME FURNISHED	TONY COOPER
POND TROPHY.	BEST POND.	RON DAVIS.
MEMBERS CHALLENGE.	MEMBERS CHALLENGE SEN.	DAVE CHESWRIGHT.
ED NICHOLL CUP.	MEMBERS CHALLENGE JUN	SEAN BOORE.
STAN HALSEY ROSE BOWL.	HIGHEST TABLE SHOW	SEAN BOORE
SOUTHCHURCH CUP.	HIGHEST TABLE SHOW R.U	RON DAVIS
ABBOT CUP.	HIGHEST TABLE SHOW JUN	SEAN.-BOORE
BROOKS SHIELD 1.	BEST MINI TANK.	LES SOMNER
BROOKS SHIELD II.	BEST MINI TANK R.U.	TONY MOLES.
HARD LUCK CUP.	HARD LUCK SENIOR.	TONY COOPER.
SOUTHEND SPORTS CENTRE CUP	HARD LUCK JUNIOR	NO .ENTRIES.
S.L.A.D.A.S. 3.	OPEN SHOWS.	DAVE CHESWRIGHT.
JONES CUP 1.	MEMBERS BEST FISH SEN.	PAUL' BOORE
S.L.A.D.A.S. 5.	MEMBERS BEST FISH JUN	SEAN BOORE
MERITORIOUS BREEDING SHLD BREEDING.		NOT PRESENTED.

NOTES- SOUTHEND SPORTS CENTRE CUP - HARD LUCK JUNIOR - Not returned by winner C. Dickinson- winner 1977-8.

There have been several queries as to whom should have which trophies tLis year. It would appear that over the last few years details of trophies have become rather muddled. I will attempt to sort this out at the next committee meeting and try to settle this problem so members can know exactly what they are able to compete for in 1981.

16th DECEMBER, 1980.

Our once a year Social Evening where we all sit around doing nothing but chatting amongst ourselves and polishing off as much wine as possible in three hours. John Mason presented the prizes this year. The results being printed under the 2nd of Decembers Club report.:

RAFFLE PRIZES.

TERRY BLACKMORE.	KNIFE SET	MRS P. BOORE	KITCHEN SET
DAVE BURGES.	CRACKERS	T. WHITE.	UMBRELLA

TABLE SHOW RESULTS.

...	
CLASS- SNAILS SENIOR.	2 ENTRIES. JUDGEi- A. WALLER.
1 st R. NEALE	84 POINTS.
2 nd J. WIMBUSH.	83 POINTS,

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CLASS - SNALS JUNIOR. 2 ENTRIES, JUDGE- A. WALLER.
1st . J. WALLER. 69 POINTS. 2nd T. WALLER. 65 POINTS.

CLASS - NOVELTY SENIOR. 2 ENTRIES JUDGE- A. WALLER
1st R. NEALE. RAINBOW FISH 2nd S. BOORE. DISCUS

...

CLASS - NOVELTY JUNIOR. 1 ENTRY. JUDGE- A. WALLER
1st R. PEARMAN. ' PENCIL FISH.

CLASS - FRY .REARING SENIOR. 8 ENTRIES, JUDGES- A. 'WALLER.
1st MRS PERRY. 74 POINTS.
2nd A. COOPER 73 POINTS.
3rd A. COOPER 72 POINTS.
4th D. SURGES 72 POINTS

CLASS - FRY REARING JUNIOR. 1 ENTRY...JUDGES- D. CHESWRIGHT. A. FARROW.
1st J. WOOD. 72 POINTS.

6th JANUARY 1981.

As I was doing the table show I did not get to see any of the meeting so I don't KNOW
WHAT WENT On.

RAFFLE PRIZES.

JOAN FARROW.	SOCKET SET	RON DAVIS	TABLE MATS
ROY CROW.	SOAPS	MARGARET WALLER.	BRUSH SET.

TABLE SHOW RESULTS.

CLASS. B -. BARBS. SENIOR. 7 ENTRIES. JUDGE;- T. WALLER.
1st RON DAVIS. B. NIGROFASCIATUS. 72½ POINTS.
2nd LES SOMNER. B. PUCKELLI. 71½ POINTS.
3rd LES SOMNER. B. EVERETTI 71 POINTS
4th RALPH NEAL, B. TETRAZONA 69½ POINTS

CLASS By - BARBS JUNIOR. 3 ENTRIES, JUDGE- T. WALLER
1st TONY GILBEY. B, TETRAZONA 60½POINTS
2nd TONY GILBEY. B, TETRAZONA 59 POINTS
3rd TERRY GILBEY. B, TETRAZONA 57½ POINTS

CLASS Q - SWORDS. 1 ENTRY. JUDGE T. WALLER
1st RON DAVIS. X. HELLERI. 63 POINTS

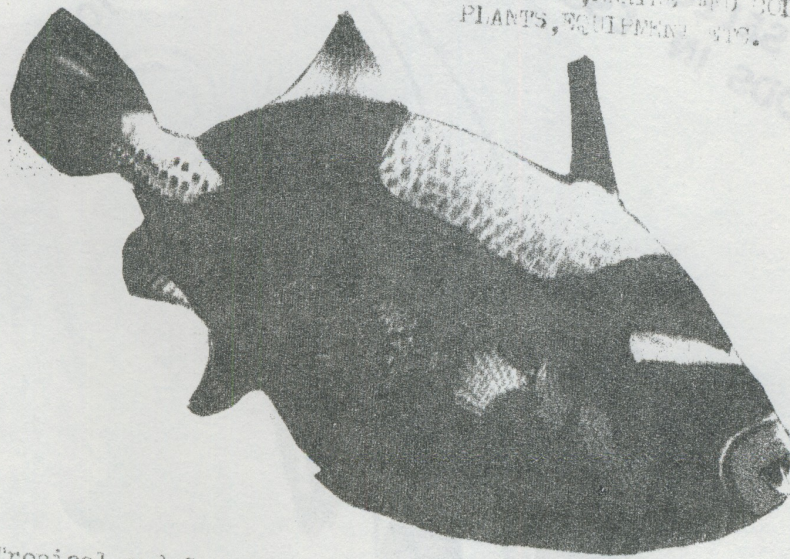
CLASS Qy - SWORDS JUNIOR. 5 ENTRIES, JUDGE T. WALLER
1st R. PEARMAN. X. HELLERI. 62 POINTS
2nd TERRY GILBEY. X. HELLERI. 58 POINTS
3rd TERRY GILBEY X. HELLERI.. 54½POINTS
4th TERRY GILBEY. X. HELLERI. 54 POINTS

MEDALS PRESENTED FOR ALL FOUR CLASSES.

Studio One Aquatics



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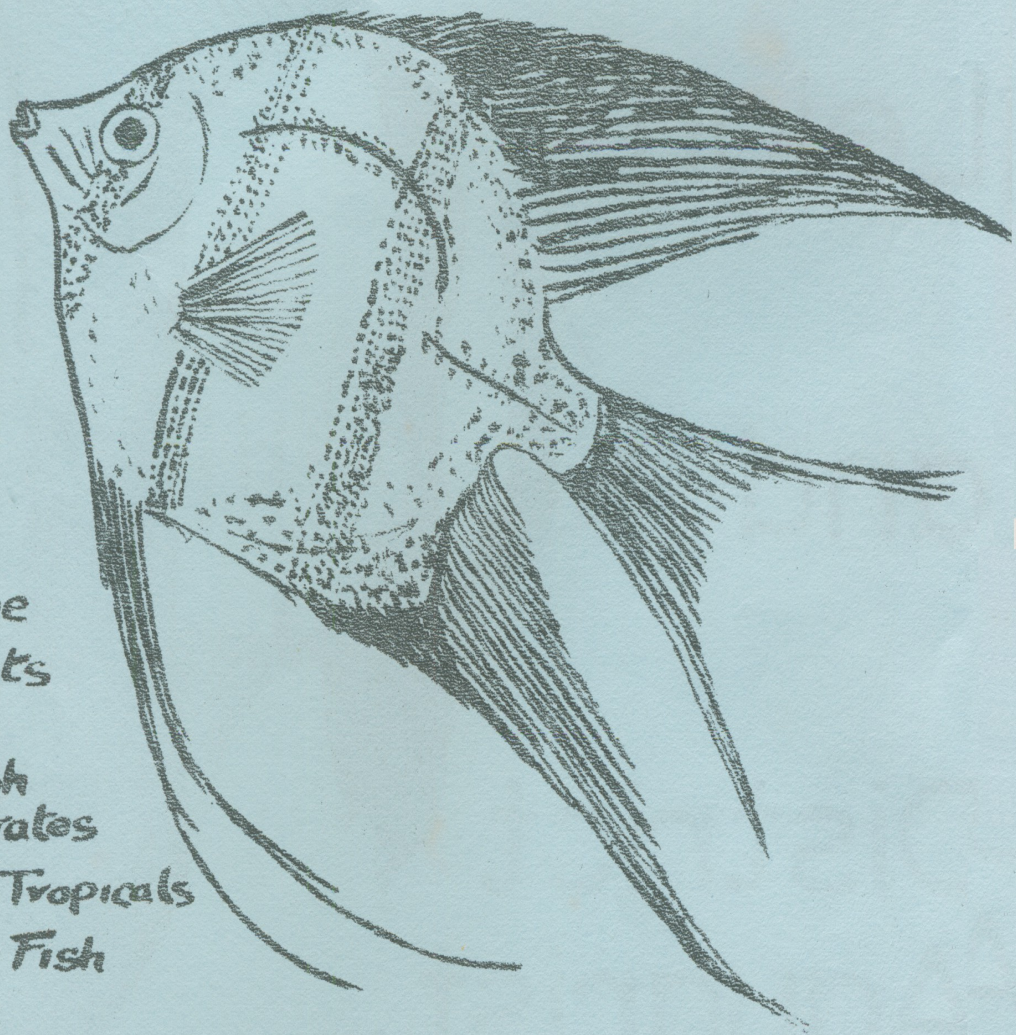


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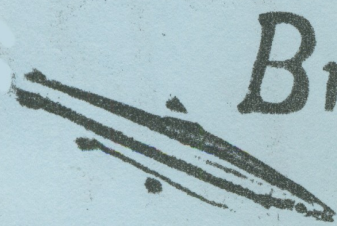
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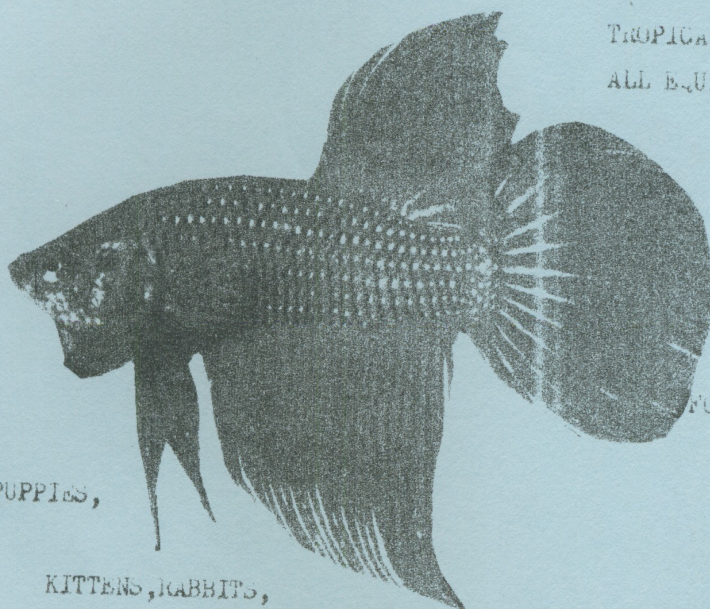
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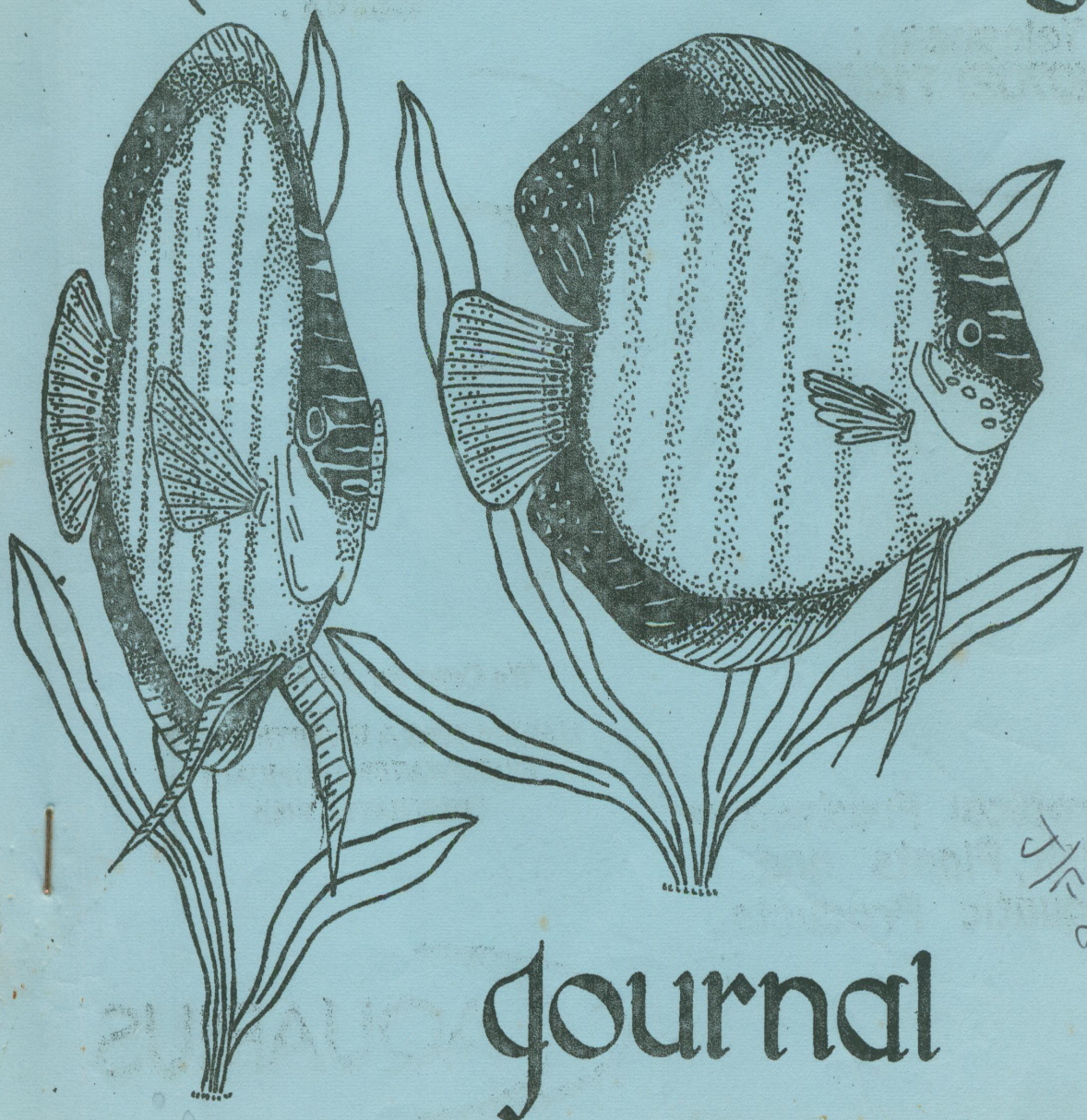
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84

Southend, Leigh, and District Aquarist Society



Journal

2/1/81

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(Founded 1935 or before)

Meetings are held on the 1st and 3rd Tuesday of every month; the meeting commences at 8.30 p.m.

VENUE-

ST. ANDREWS CHURCH HALL
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BI-MONTHLY JOURNAL No. 84

JANUARY - FEBRUARY 1981.

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OPEN SHOW SECRETARY.

JIM LONDON (AS ABOVE).

EDITORIAL.

Well! once again its that time of the year when the major thoughts of the Society are towards holding once again a successful Open Show. I have been very busy preparing a rush edition of the magazine for the show. By rush I don't mean that the contents have been rushed, just that it will be available nearly a month ahead of time. I am rather pleased with this edition, as it covers a good deal of fish topics. From the Marine World the "Cleaner Wrasse" from egg layers "Breeding Angels" and an odd catfish and details of a couple of rare Livebearers. The authors 'being Peter Capon, Dave Burges and Dave Cheswright plus of course the usual Club News and results. Can't be bad, can it,

I shan't go into much details of the Open Show as Dave Cheswright (our President) says it all else where. But for any prospective new members reading this magazine I'll go into a few details about Club Meetings.

Meetings are held on the first and third Tuesday of each month at St. Andrews Church Hall, Electric Avenue, Westcliff-on-Sea (entrance is in Southview Drive), We start milling around at about 8.15 pm for an 8.30 pm start (Once we can convince the Scouts to go home). Usually the meeting consists of either a speaker, quiz or competition. Often the speaker brings along slides of what he is talking about, or even samples if he has them available to show us. Even the relative newcomer to our hobby is taken care of when all members discuss any problems they have come across. About 4 times a year Auctions are held, where members can out bid each other in: an attempt to obtain fish, tanks etc.,. 25% of the proceeds are kept by the club; as this is an excellent way to raise additional funds.

Table shows are held each meeting and either a medal or trophy is awarded to class winners. The trophies are retained for a year. Both Junior and Senior Classes are held.

Midway through the evening tea or coffee with biscuits are available, these are at a very reasonable price.

Being a large club as Aquarist Societies go, often there are fifty members at a meeting, so why not come along and see what a great bunch we are. By the way, many of the wives come along with their husbands as they are often just as interested as their husbands in fish keeping. And of course, any juniors are very welcome to come along.

Terry Blackmore, (EDITOR).

PRESIDENT'S NOTES.

DAVE CHESWRIGHT.

Once again the open show is here and thanks are due to Jim London our Show Secretary, and to all Members who have helped him to set-up the Secretarial work, hard labour, selling Draw tickets preparing food and all the other small and large jobs which crop up. Visitors to the Show may not realise that all the Equipment has to be man-handled from under the stage of St. Andrews Hall, Westcliff-on-Sea, where we hold our meetings, loaded into vans and moved the 2 or 3 miles to Leigh only to be all unloaded again. This is not the end of the story as it all has to be taken back as soon as the Show is closed.

John Patterson has again made trophies for us this year, we have had trophy parts donated to us and also received various other goods donated towards the Show.

I hope that, in spite of the high Petrol costs, Aquarists have found it possible once again to support us with a large number of entries. There were over 600 entries at the first Show within a reasonable distance of us, i.e. Croydon on 28th March, 1981. This was their Golden Jubilee Show so whether our entries will get near to this I do not know. Some Societies are not holding Open Shows this year due to the costs involved. At Southend we budget to cover the Show costs and I hope that the Show will again achieve this as well as making a good day out for Exhibitors, Judges and the Public. Thanks are due, of course to the F.B.A.S. Judges, whether or not you agree with them. These ultra-keen experienced Aquarists come to Shows to do the difficult task of separating out the best 4 entries in each class and they do this -for no cost apart from their expenses, which are sometimes so low that they must have their own petrol pumps, and a meal, plus, of course, endless cups of tea. We have various Specialist Society stands at the Show and these people as well do all this for love. We must include the F.B.A.S. Stand which travels around the country publicising the services available to Societies again for the price of cups of tea and the odd sandwich. Exhibitors must not be forgotten as they are the mainstay of the Show. Some travel long distances to enter their exhibits and all have to get up very early to catch and organise their entries. Congratulations to all the winners and to those who are unsuccessful I would say do not lose heart but try again at other Shows and again at Southend in 1982.

Southend, Leigh and District Aquarists Society is, I think one of the largest in the U.K. We meet twice monthly and have a varied programme which is prepared for a Year at a time. Details are available at our stand, as is advice on your fish-keeping. Meetings are thoroughly enjoyed by all those who attend and are the time for Members to have a good chat about their fishes, etc., as well as listen to the experts who travel to give out their knowledge. You will find us a friendly and helpful lot if you care to come along and see.

I would like to thank Terry Blackmore for continuing to Edit this Journal even though he says this is a "temp" job only. We are still looking for a "perm" Editor so that he can get on with his fish-keeping.

CATFISH THAT SUCKLE THEIR YOUNG.

PETER CAPON.

Much has been written on the parental care of the Discus and the way that the fry receive nourishment from the bodies of both their parents. In the early 1950's Skipper (1) startled the aquarium world when he first disclosed that the reason for failure of aquarists in trying to rear Discus lay in the fact that they treated them in the same manner as the Angelfish and removed the eggs from the parents. It was only when it was realised that the Discus fry was only able to survive if it was allowed access to its parents that successful spawnings lead to successful rearings. The Discus fry must have the secretion that emits from both the male and female bodies as a first food; the normal first foods of other Cichlids such as the Angel are not suitable for the Discus. Without the food picked from their parents' bodies the young Discus will slowly die of starvation.

However, there are rumours of substitutes for the food naturally supplied by the adults but as yet these have been unsubstantiated. Although it is said that one commercial breeder in the U.S.A. rears all his Discus fry on a "synthetic" food and that the fry never even see their parents as they are removed as soon as the eggs are laid.

The Discus is not quite as unique as at first appears for there are other fishes that nourish their fry from their own body secretions.

Two catfish of the genus *Mystus*, *Mystus aor* and *M. seenghala* have been reported to "suckle" their young by the Indian Ichthyologist B. Sandara Raj (2). These two *Mystus* grow up to six feet. Sandara Raj came across a *Mystus* offered for sale in a market, the fish had an inflamed and spongy underside. He questioned the fisherman about the fish but all the reluctant fisherman would tell him was that they had caught the fish on its nest, no amount of persuasion would get them to show the Ichthyologist the location of these fish nests.

Some years later Sandara Raj was, at last, able to locate and study the nests of both *Mystus aor* and *M. seenghala*. He reported that the brooding fish were all males and that all showed the bright red spongy undersides, this unusual skin texture and colour continued onto the ventrals, anal fin, and lower part of the caudal. Examination showed that the red colour was due to swollen blood vessels, whilst numerous tube-like projections and much folding of the skin gave the spongy texture.

The fry appeared to be attached to the father and their swollen stomachs were filled with a milky fluid. When disturbed the fry scattered only to return to their parent in a few minutes whereupon they started to pick at the spongy area. The males were obviously secreting the white fluid that had been observed in the fry's stomachs.

Sandara Raj managed to collect some of the "milk" for laboratory examination which revealed that the fluid consisted mainly of protein but that it did not resemble mammal milk at all, excepting for its colour and the use to which it was put.

It was also reported about forty-five years ago, that the underside of the female *Mystus culio* had the skin thickened and.....

Continued from page 5

raised to form papillae, there were no records of suckling fry, nor was the belly structurally like the male *Mystus* reported by Raj. Whether this species of *Mystus* feeds its fry is yet to be proven. Sandar Raj's findings have been confirmed by other Indian scientists (3) who have stated that the fry of *Mystus seenghala* feed only on the male's secretion until they are at least an inch and three quarters. . The male *Mystus* does not carry the eggs attached to his belly but leaves them in the nest.

It is interesting to note that several species of the South American genera *Aspredo* or *Platystacus* carry the eggs attached to the belly of the female by a tiny thread which is less than a quarter of an inch long. It appears that after the spawning the female lays on the eggs to make them stick to the little "stalks"

The parental care that fishes exhibit never ceases to amaze the writer and it is quite possible that many of the catfish that are now imported including the smaller species of *Mystus* that, find their way into the aquarist's tanks, may well copy their larger relatives in providing "milk" for their young. It only awaits the observant aquarist who is both lucky enough and skillful enough to obtain a spawning, to report that this is so.

REFERENCES

- (1) Skipper :THOSE- BRITISH BRED POMPADORS" Water Life Volume 12, number 2, pp 63 - 64.
- (2) Sundara Raj Proceedings Of the National Institute of Sciences India, Part B Volume 28, pp 193 - 200 "The extraordinary breeding habits of the catfish *Mystus aor* (Hamilton) and *Mystus seenghala* (Sykes)
- (3) Saigal and Motwanij "Early life history, bionomics and breeding of *Mystus* (*Ostbebagrus*) *seenghala*." Indian Journal of Fisheries Volume 8 pp 60 - 74.

COMING ATTRACTIONS.

OPEN SHOW DATES 1981.

MAY 17 th	MEDWAY, KENT.
31 st	MID-SUSSEX.
JUNE 14 th	DUNMOW, ESSEX.
JULY 5 th	SOUTH-EAST LONDON
11 th /12 th	ROM.FORD & BECONTREE. .
SEPT 12 th	HOUNSLOW.
20 th	DISS
OCT 10 th /11 th	NORFOLK,
	TONBRIDGE, KENT. WALTHAMSTOWE, LONDON
	(date to be confirmed).

ANGEL BREEDING

DAVE BURGES.

This is my second go at tropical fish keeping. This time when I started I had it in mind to breed Angels. I don't know why I just fancied it. A lot of people said it was difficult to do indoors as Angels do not like disturbances, but being stubborn I kept trying. 'It was about 2 years before I had any sort of luck. That was with 5 fish I grew to about 3" (These I always think back on as the famous five).

My early attempts were foiled really by only having one tank. Putting a partition in a tank does not seem to be on. I had numerous attempts putting eggs in methylene Blue with an air stone or airline but again nothing. I then tried in a 18 x 12 x 7 tank with gravel and plants but again no go. The fry always disappeared just before free swimming. I believe they must of got lost in the gravel.

I had by now been fortunate enough to buy another 3 foot tank I had this as a community tank, but purchased 8 small angels from three shops. With the hope of getting a male and female that were not brother and sister. Finally these angels paired off. So I purchased a 24 x 12 x 12 tank from Studio One, saying to Molly I am going to breed angels in this, and getting a knowing sort of smile and Oh are you.!

This tank I placed in the lounge 13" off the floor. filled with water no gravel but with Indian fern lead weighted to take the bareness away from it. I also stood two pieces of slate about 2" wide and 10" long in the tank. One leaning on the end and the other against the back. Still no success. That Xmas (1980) my wife gave me a book amongst other things called "The Pictorial Encyclopaedia of Fishes". In this it clearly states that angel fish eggs require a temperature of at least 27-32°C to survive. I raised the temperature and with the next spawning got the famous five. I have since had a shoal of 35 and one of 15 but have no spare room again. I now have 5 tanks indoors and think this is enough really.

I really need a fish house but have nowhere to put one, and if I did I don't think I would have the time to run it, as I always seem to be busy.

Back to the angels I think the important things are an adult pair of fish. In my early attempts the fish were too young. Raising the temperature was I feel sure another important factor. Having two pieces of slate helps as angel fish move their eggs around normally in the evening to protect them from predators at night. When I first saw this I thought they were eating the eggs. But don't flap the parents move them in their mouths from one place to another. If some of the eggs have gone white (not fertilised) they leave these behind. Parents will also pick up from the bottom fry that have fallen from the main body of eggs and clean them before blowing them back into the nest.

The other important factor in getting the fry to survive is feeding. Brine shrimp is a must. I did not think it that important when Dave Cheswright first told me about it, but it definitely gives the fish a good start. "Thanks Dave".

A lot of people seem to think that lowering the water to about

LIVE BEARERS (CONTINUED) .

DAVE CHESWRIGHT,

I continue with some notes on Species.

1.). *Belenosox belizanus*. I first encountered this fish when Howard Preston brought some back from the wild a few years ago. Its common name is the Pike Livebearer and in shape and habits it is very much the same as our own Pike (*Esox lucius*). It differs in size, luckily!! Males grow to about 4 inches (100mm) and females to about 6/7 inches (150/175mm). Shape is the long a streamline "Pike" appearance and colour is Greyish to black, lighter underneath. The teeth can be easily seen in the longish mouth. Fry have a brilliant red mark on their anal fin which fades as they grow — perhaps to attract fry which is their only food.

This specie requires no unusual conditions except that you keep it only with its own kind. Even with bigger fishes they will, if hungry,- take a bite or two. Temperature is not critical - they are happy between 70 and 80°F (21/26°C). A pair can be kept in a 24 inch tank, with a few plants for them to hide in. I hasten to add that they are not hiding from fright but are merely resting as does any Pike most of the time. If they are hungry they are hiding in wait for prey. They do not become active unless they are hungry. The Male usually stays behind the female and manages to fertilise her without losing all his body parts. I did once have a female who ate the male in one gulp but this should not happen, unless you do not feed them properly. Now we come to the main "problem" of keeping this specie. Like most predators they can go without food for a long time, even for several weeks, BUT, as far as I know,- they will eat only live fishes. Further they seem to eat only "livebearer shaped" fishes, i.e. fishes with longish, slim bodies. They will NOT eat round-shaped fishes such as baby Cichlids. They eat in typical Pike fashion by catching a fish in the mouth and swallowing it head first they do not swallow their prey in any other way, neither will they eat part of a fish if they happen to bite it in half. One half may be eaten but the other half will fall to the bottom of the tank. Unless they are fed in this way with suitably-sized fishes they will starve and in no way will they eat meat, worms or dead fishes. I even tried them once with baby frogs which were swallowed whole, but, an hour later were happily swimming around the tank! A fully grown female can swallow a 3 inch fish with no trouble and this will keep it going for 2 or 3 weeks. In my case they are fed with guppy-sized fishes as and when available. Fry are about an inch (25mm) long and a female can drop 80 or so at a time. I only once bred them and raised 6, having given the others away. They will eat daphnia but will not grow on these. You must feed them with guppy, etc fry, about 6 a day each minimum and the size of the food must increase as they grow. I currently have a Pair and, if they breed, will again only keep 6. If anyone is interested in the Specie please let me know so that I can let them have fry if I get any in due course.

2). *Anableps*. This is a new specie to me. It is the first livebearer which was discovered way back. It spends most of its.....

time at the surface of the water with its eyes, or rather part of them, out of the water regularly dipping its head under the water. Hence the name "Four-eyes" as its eyes are divided into 2 halves for above and below water sight, at the same time. There has been a recent import and I bought 4 specimens in February, 1981, about 2½ inches long (62mm). Taking the advice of Colin Howe of Newbury, who has had a pair for over a year and has obtained 2 live plus 2 dead fry, I put mine into an 18 inch tank with 4 inches of water. A flower pot is placed upside down with a slate on top so that the water is about ¼ to ½ inch above the slate (or flat rock). Food, which consists of earthworms chopped plus some flake food mixed in, is placed on the slate. The fish come onto the slate where they are almost out of the water to feed. I have been changing about 4 pints of water daily and adding a very small amount of salt, about 1 teaspoonful to 4 pints. Whether this is absolutely necessary I am not sure but I am following advice given. In 6 weeks they have grown to about 3½ inches in length (88mm), which I think is quite good. I am told that they will eat flies, slugs, etc and pieces of ox-heart, in fact they are not difficult to feed. They are great jumpers and will catch flies in midair. They grow, according to the books, to about 10 inches (250mm) but I think this length is unlikely to be achieved even in a large aquarium. Mine will soon have to be moved to a bigger tank as there is too much pollution from their droppings. Whatever tank they are in they need only shallow water and, in a larger tank, I hope to be able to provide somewhere for them to come right out of the water. This they do in order to feed and have short sunbathes, provided the strata is wet. There are more than one species in this genus. The ones I have and others that have been imported in recent years appear to be *Anableps anableps*. The fry are about 2 inches (50mm) when born. If you see them in the shops they are only a little larger than this. Avoid buying them if they are at all hollow bellied. It is obvious that newly born fry are being caught and sent over and, as with any babies, if they are not fed properly in the first days of life they will succumb. If you see them 2½ inches or more long and they look well-fed, these are the ones to buy. I would not recommend this fish for community tanks. They will not harm other fish, I am told, even when 6 or 8 inches long, but they definitely need the conditions to enable them to come at least partly, out of the water.
(to be continued)

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continued from page 7

ANGEL BREEDING.

4" helps. The reason being to help give the fish an initial burst of air, I have never done this, and Bob Essen thinks it unnecessary.

As for the tank being indoors when my fish start to breed nothing seems to stop them. Not even the baby banging cars etc., on the side of the tank, Would some one knocking on your wall stop you!.

Well I hope this article will give someone some help. If you start to breed angels or any other fish don't give up after a couple of goes if nothing happens. Just keep on trying who knows !

**CLEANER SEX LIFE or
SEX CHANGES IN LABROIDES DIMIDIATUS**

By P.F. CAPON.

Labroides (Fissilabrus) dimidiatus gets its common name of Cleaner Wrasse from its habit of eating the parasites that infest the scales, fins and even the gills and mouths of other species of fishes. The cleaner enters the mouths of even large predators to pick off the irritating parasites within and in doing so is not devoured indeed the fish being cleaned seems to instinctively know that the cleaner is a benefactor. It is said that even that tiger of the deep, the barracuda, will avail itself of the wrasse's ministrations.

Fish infested with various parasites seek out the cleaner and his territory and many authorities claim to have seen the 'patients' actually queue by a particular piece of coral or rock whilst they patiently await the removal of their sources of irritation. ;;

In colour the *Labroides dimidiatus* is a silvery white with a large black band extending the full length of the fish. It is interesting to note that the neon goby, *Elactineus ostenops*, from Florida has a similar patterning to the wrasse, excepting that the goby's body is black with large blue stripes running the full length of the body. Presumably the broad strong line pattern on a small fish, the wrasse reaches ten centimetres, is recognised by the client fish in need of cleaning? since *E. ostenops* also has a cleaning function.

L. dimidiatus lives on many of the coral reefs of the Indo-Pacific region. It is a territorial fish which lives in groups of about eight to ten. There is no sexual dimorphism the only method of sexing being that generally the male is the larger member of the group and is recognised by his aggressive displays to other members of the group. There is a range of sizes within the group from the male through the larger females down to a few juvenile females.

The male as leader of his harem maintains them in subservience by displays of aggressive behaviour. He is always on the move patrolling his chosen territory, checking its invisible boundaries against incursions from other males. In common with many other males of territorial animals, both terrestrial and aquatic, whilst within the confines of his domain he exhibits his superiority over any other male but should he cross into a neighbour's territory then he in turn is subject to aggressive displays until he returns to his own area. This habit can lead to much toing and froing across the boundaries with first one then the other male coming under attack. Normally these aggressive displays are only ritualized form of fighting and it is rare, under natural conditions, for life and death fights to occur. It should be remembered, however, that the aquarium can never be considered a natural environment and the aquarist may have to intervene to stop damage to his prized possessions.

Within the females there is a dominance scale, one large female will dominate all the smaller females, the second largest female will dominate all the others excepting the largest, and so on down the "pecking order". The senior female is able to move freely throughout her mate's territory and her own territory and the feeding area is roughly the same as his excepting that she must retreat.....

whenever the male exhibits aggression;

Occasionally two females may share equally the dominant position as "head wives" of the harem. The male, of course, and the females highest up the social scale take the better feeding areas, this usually means that the male and dominant female take up the central area of the territory with the less dominant females on the periphery and the least dominant females and juveniles filling in the territorial gaps. These small females and juveniles tend to wander about more than the larger members of the group and are constantly seeking better feeding areas and probing for a more advantageous position in the social scale, regularly they are harassed and chased away by their more aggressive sisters.

The males exhibit two types of display, one a straight forward aggressive display towards other males, and the other whilst still aggressive also includes a courtship element when confronting a female.

Should a female die another of next lower status will, within a few hours, take over her territory, abandoning her own to be taken over by the next subordinate. There generally follows an orderly movement of all the females through the ranks by one position. Occasionally by exhibiting a more aggressive display a female can at this stage jump several stages in the social scale.

When the male dies or otherwise disappears from the head of the harem there is again a general move of all its members up the status scale. Within an hour of the original male's demise the dominant female takes over his role as the leader of the group. At the same time she begins to change sex, the first outward sign of this being "her" acquiring the masculine display which "he" now performs to the females of his harem. The full change to male behaviour takes only several hours but complete functioning as a male takes several days to complete.

Should another male invade the territory in an attempt to incorporate the females into his own group the situation becomes more complicated. Should the intruder be able to fully dominate the erstwhile female the latter is able to revert to a functioning female.

Examination of the females gonads shows that the cleaner wrasse is really a hermaphrodite in that all of them have traces of viable testicular material scattered throughout their ovaries. The hormones from the testicular areas are held in check, in part, by being surrounded by a membrane which prevents their cancelling out the female hormones of the fish. Presumably the aggressive behaviour of the male also effects the hormone balance in the females, subjugation favouring the release of copious quantities of female hormones.

Once the rise to the highest social position, that of the male, has been achieved the lack of a fish to be dominated by causes a release of testicular based hormones and the ovaries start to degenerate thereby leading to masculine characters to be exhibited. It does, however, take up to three weeks for viable sperm to be produced by the "new" male.

A newly created male must first dominate with aggressive displays the most dominant females of his harem, that is those most likely to change sex and threaten his position. Indeed should he.....

allow his control to slip the dominant female can herself change sex and take over part of his harem and territory to form a new colony.

It would appear that all young cleaner wrasses are female until such a time as they are able to dominate a group whereupon they undergo the change of gender. The system of sex change in this species of *Labroides* has advantages in the survival of the race as an excess of functioning males would result in wasteful aggression and even fighting, whereas, in the system that has evolved just sufficient males are always available to ensure the viability of the species at all times. It is to be assumed that several other species of wrasse, particularly those where the male maintains a harem may well be able to change sex should the need arise.

CLUB REPORT.

20th January 81.

A talk: on Barbs tonight, I forget who the speaker was so I am unable to give credit where due. I hope the speaker will forgive me for this lapse, but I will take more details in future. It has been suggested by the committee that the club reports be reduced in content and as it happens a couple of the raffle results are missing anyway, so as suggested the raffle results will be dropped from the club results (If anyone objects please let me know and it can be taken up with the committee again).

TABLE SHOW RESULTS.

Members Challenge Senior. 16 Entries. Members Challenge Junior. 7 Entries.

Results after 4th showing. Judge- D. DURRANT.

3rd February 81.

A beginners night where all divided into small groups and each group discussed different aspects and problems encountered by beginners. Always appears to be interesting and a popular night.

TABLE SHOW RESULTS.

CLASS 0- MALE CUPPIES. 5 ENTRIES. JUDGE- T. WALLER.

1 st	RON DAVIS.	75½ POINTS
2 nd	RALPH NEALE.	74 POINTS
3 rd	LES SOMNER	72 POINTS
4 th	LES SOMNER	71 POINTS

CLASS 0y- MALE GUPPIES JUNIOR. 1 ENTRY. JUDGE:- T. WALLER.

1 st	TERRY GILBEY.	74½ POINTS.
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BEST FISH. 6 ENTRIES. JUDGE:- T. WALLER.

1 st	TERRY GILBEY. MALE GUPPY.	74½ POINTS
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MEDALS GIVEN TO BOTH CLASS WINNERS.

17th February 81.

A talk on cichlids is all the detail I have on tonight's programme.

TABLE SHOW RESULTS.

CLASS-Ez-A.O.S. LABYRINTHS. 2 ENTRIES JUDGE M. WALLER

1st LES SOMNER.. SPARKLING GOURAMI. 70 POINTS

2nd TONY COOPER. KISSING GOURAMI. 67 POINTS.

CLASS Ezy-A.O.S. LABYRINTHS JUNIOR. 5 ENTRIES. JUDGE;- M. WALLER.

1st ROB PEARMAN. PEARL GOURAMI. 73½ POINTS.

2nd - MARK CANE. THREE SPOT GOURAMI 72½ POINTS.

3rd JULIAM .WOOD. GOLDEN GOURAMI 70 POINTS

4th FOB PEARMAN. GOLDEN GOURAMI 67½ POINTS.

.CLASS Ea-SIAMESE FIGHTERS. 4 ENTRIES. JUDGE:- M. WALLER.

1st SEAN BOORE. 72 POINTS.

2nd LESS SOMNER. 70 POINTS.

3rd RALPH NEALE. 69½ POINTS.

4th D. BUSH. 69 POINTS.

CLASS Eay-SIAMESE FIGHTERS JUNIOR. NO ENTRIES. .
MEDALS TO WINERS OF ALL THREE CLASSES.

3rd MARCH, 81.

Dave Cheswright gave the first part of this evenings talk and Jim London gave the second half. Dave I think spoke on fish foods and Jim had everyone laughing, being kept rather busy on the table show I didn't have much chance to listen. Nice to see a class of 19 entries in the Senior Characins, which was a really good class.

TABLE SHOW RESULTS.

CLASS C-CHARACINS. 19 ENTRIES. JUDGE : - D. CHESWRIGHT

1st TONY COOPER. BLIND CAVE FISH. 77 POINTS

2nd LES SOMNER. CONGO TETRA 75½ POINTS.

3rd TONY COOPER. BLACK NEON. TETRA 75 POINTS.

4th LES;SOMNER. SERPEA TETRA 71 POINTS.

CLASS Cy- CHARACINS JUNIOR. 7 ENTRIES. JUDGE- D.DURRANT

1st ROB PEARMAN. SERPEA TETRA 73 POINTS

2nd TERRY GILBEY. HATCHET FISH 71 POINTS.

3rd- TERRY GILBEY. NEON TETRA. 67 POINTS

4th JULIAN WOOD EMPORER TETRA 66 POINTS..

CLASS M-A.O.S. EGGLAYERS. 4 ENTRIES, JUDGES- J.LONDON.

1st TONY COOPER. GLASSFISH 70 POINTS

2nd PAUL RASHBROOK. RUBY SHARK 66 POINTS

3rd PAUL RASHBKOOK WASP GOBY. 56 POINTS

4th PAUL RASHBROOK. AFRICAN GOBY 49 POINTS.

...

.CLASS My-A.O.S. EGGLAYERS JUNIOR. . 4 ENTRIES, JUDGE;- J.LONDON

1st TERRY tILBEY. FLYING FOX. 82 POINTS

2nd TERRY GILBEY. BUTTERFLY FISH. 64 POINTS

3rd TONY GILBEY. ALBINO RUBY SHARK 61 POINTS.

4th ROB PEARMAN. SUCKING LOACH 56 POINTS..

...

TROPHY:- BEST CHARACIN:- TONY COOPER BLIND CAVE FISH. JUDGED BY:- DAVE

CHESWRIGHT AND DEREK DURRANT. .

-13-

17th MARCH, 81.

F.B.A.S. tape and slide show on "Evolution" what little I saw of this tape and slide show was very good, I was very surprised as we (some of the committee) were not to sure how this would go down as this one had not been seen before.

TABLE SHOW RESULTS.

CLASS L - LOACHES.		19 ENTRIES.	JUDGE D. CHESWRIGHT
1 st	LESS SOMNER.	B. LUCAS BAH.	90 POINTS
2 nd	PAUL BOORE	KUHLI LOACH.	84 POINTS
3 rd	PAUL BOORE.	KUHLI LOACH	79 POINTS
4 th	TONY COOPER.	WEATHER LOACH	76 POINTS

CLASS Ly - LOACHES JUNIOR.		4 ENTRIES.	JUDGE;- J. LONDON, .
1 st	TERRY GILBEY.	DWARF LOACH	50 POINTS
2 nd	TERRY GILBEY.	DWARF LOACH	45 POINTS
3 rd	TERRY GILBEY.	KHULI LOACH	43½ POINTS.
4 th	TERRY GILBEY.	KHULI LOACH.	43 POINTS.

CLASS R - PLATYS. :		1 ENTRY	JUDGE;- J. LONDON,
1 st	RON DAVIS	RED PLATY.	47 POINTS.

CLASS Ry - PLATYS JUNIOR.		1 ENTRY.	JUDGE;- J. LONDON,
1 st	MARK CANE	PLATY.	47 POINTS.

BEST IN SHOW:- LES SOMNER B. LUCAS BAH 90 POINTS.

APRIL 7th 1981.

Auction night again Dave Cheswright stood out front and took the bids while Dave Burges and Dave Holliday did the running about collecting the money and handing the fish to those making successful bids. There was plenty to auction as well from tanks to fish and plants.

TABLE SHOW RESULTS.

MEMBERS CHALLENGE SENIOR.	12 ENTRIES	JUDGE- D. DURRANT.
MEMBERS CHALLENGE JUNIOR.	.4 ENTRIES..	JUDGE- D. CURRANT.
RESULTS. AFTER FOURTH SHOWING.		

CLASS - MINITANKS SENIOR.		1 ENTRY.	JUDGE- C. CHESWRIGHT
1 st	LES SOMNER.	MINI TANK	70 POINTS

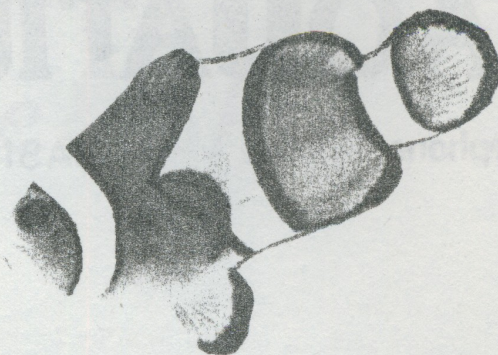
CLASS - MINITANKS JUNIOR.		2 ENTRIES.	JUDGE- C. CHESWRIGHT
1 st	TERRY GILBEY.	MINI TANK	59 POINTS
2 nd	TERRY GILBEY.....'-.....-	MINI TANK	22 POINTS

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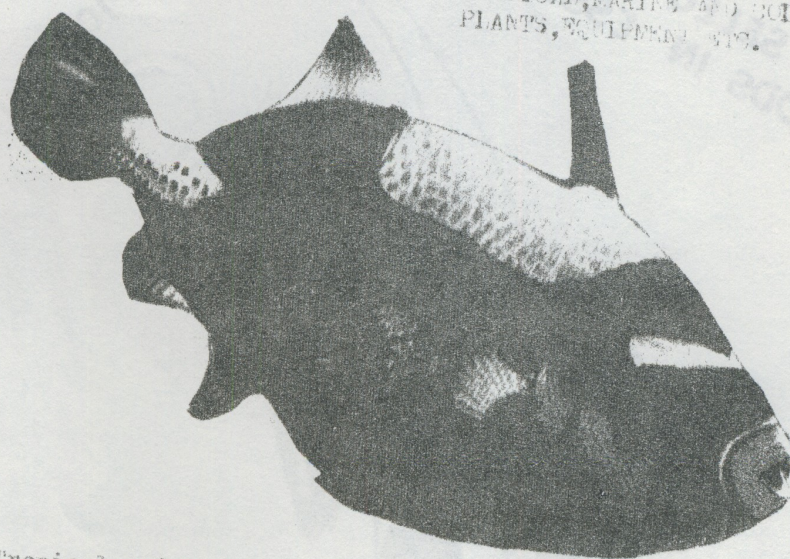
TROPHY :FOR BEST MINITANK- (THREE SHOWINGS).

Chris Cheswright who judged the Mini tanks mentioned that one of the tanks, that which came second in the junior class was very .difficult to judge- as the tank was covered in marbles instead of gravel and had glass instead of rock work and no plants. If anyone could suggest how to judge this sort of entry please let us know. Chris I know down pointed it because he thought that the glass was a danger to the fish, (very sensible I though too!)

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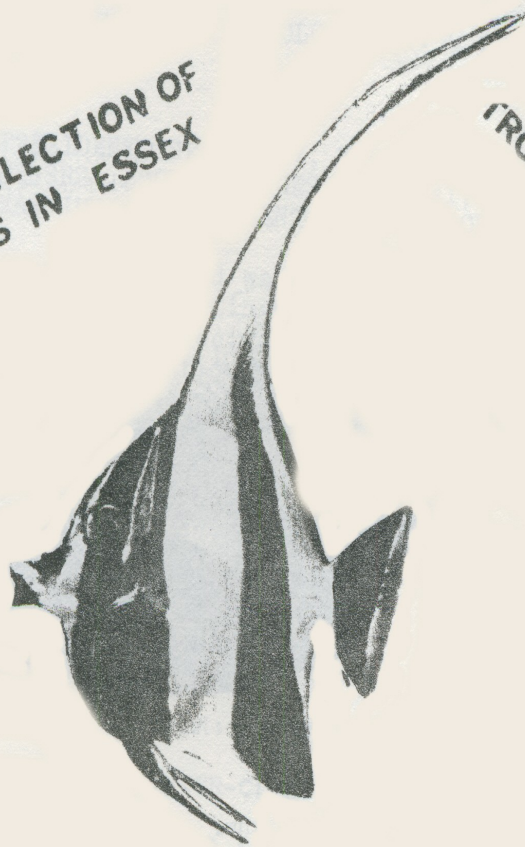
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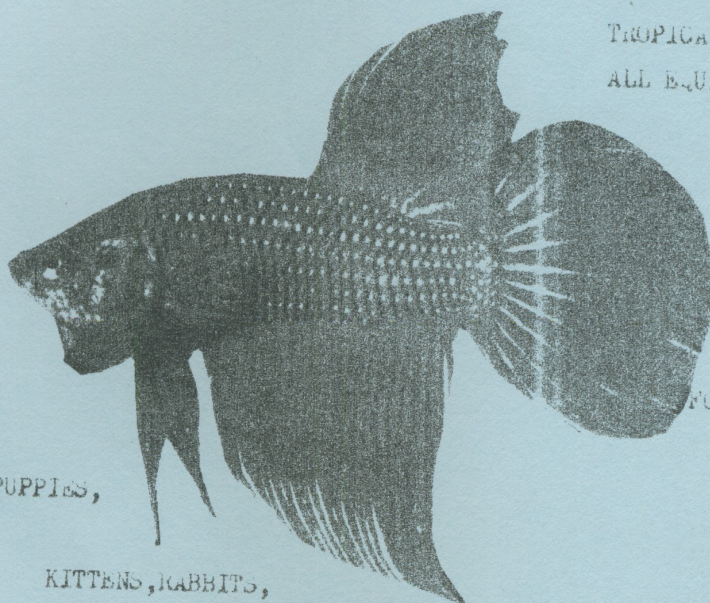
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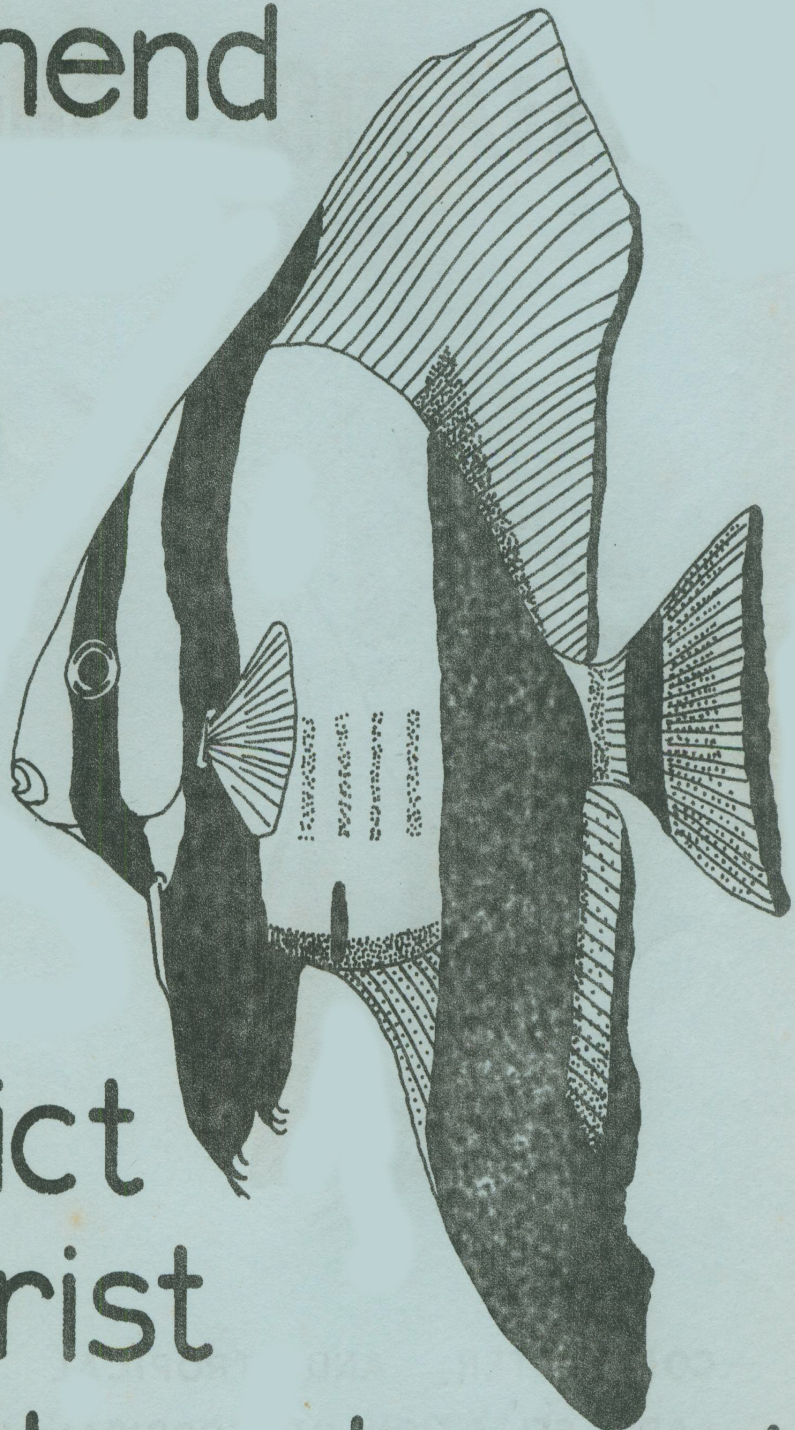
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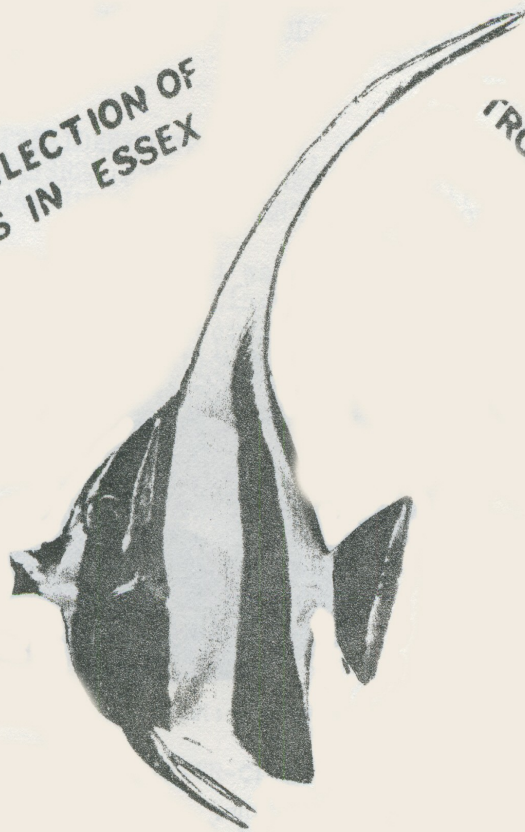
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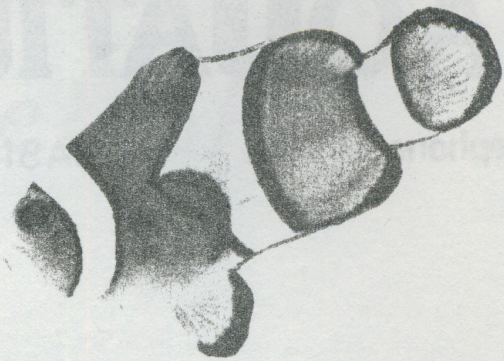
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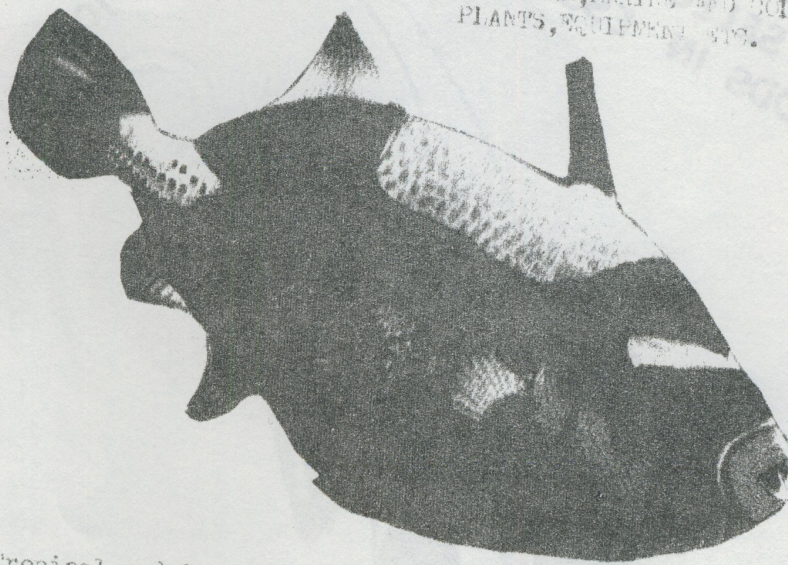


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In all the copies we can find there doesn't appear to be a Contents page nor an Editorial for Issue No 85 at all.

So in all accuracy although we were tempted to manufacture one we decided that this would not be in the spirit of reproducing the JOURNAL as it was received by our members and the exchange magazines.

If anyone has a copy of Number 85 with a contents page we would be grateful for a copy of this page, and the editorial if this actually exists.

Peter Capon
peter.capon@yahoo.com

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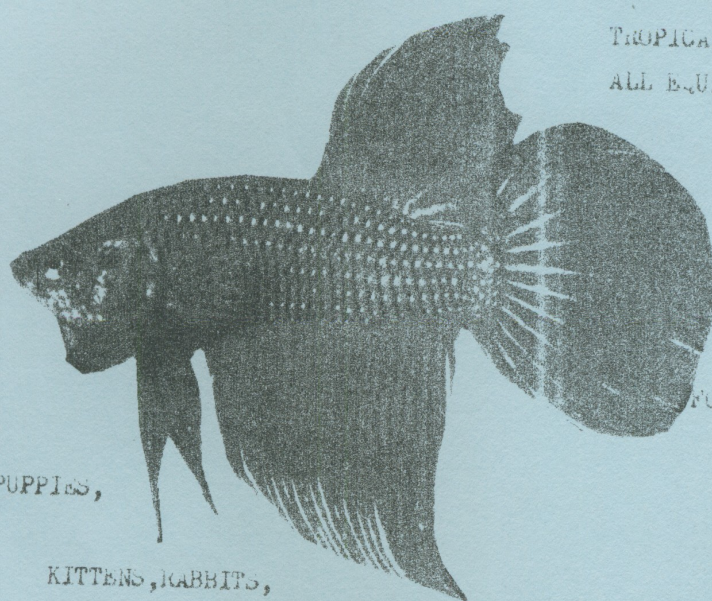
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PRESIDENT'S NOTES

Dave Cheswright

As the last Journal was that published on the day of our Open Show, in May, -a lot has happened in the meantime.

Thanks are due to, Jim London, Show Secretary, for organising the Show and the fact that a loss was made does not distract from the success of the Show. Perhaps next Year the Show Secretary will have to pull the reins in or members will have to think of and WORK AT money-raising ideas. I have accepted this job for 1982, and will welcome any ideas for raising cash, at events before the Show or on the day. As I have told mrmbers and said at the AGM I am not available for any other post. The Show Sec's. job needs full attention from December to the Show date (not yet fixed), and other members must take on the Committee posts. Your Vice-President, Dave Holiday, does not wish to stand on the next Committee due to other comitments. So, rack your brains and put feelers out for a President and Vice-President. Dave and Dave (me) have put many Years into Committee work and the "room at the top" must be occupied by 2 of you. We are not a Society worried by politics as others I know are and, luckily for us do not have people screaming for power. You find 2 good members and talk them into taking thiese 2 important posts.

I would like to thank our Editor, Terry, who, whilst being Table Show Sec, carried on with the editor post, because No ONE ELSE WOULD VOLUNTEER. . I hear that John Harrison's wife is about to be given a typewriter!!!!!!

Several members have been going to Open Shows and have been quite successful. Do not forget to add up your points for the Open Show

Members should take serious note of the new ASSOCIATION OF ESSEX & EAST LONDON AQUATIC SOCIETIES which you voted to pay £10. to join, this is a non-showing organisation intended to further knowledge of fishes and to increase the publics interest in our hobby and to promte the breeding of fishes.

The emphasis is on service to Societies members but it does need the suppoort of each Society's members. It is an Association within the F.B.A.S. And includes 10 out of about 160 Societies affiliated in the U.K – Not a small influence for the future. There are monthly meetings of the "committee" which consists of delegates from each Society.. Other members are also welcome to attend. The delegate doesnot have to be the same member each month- so why not volunteer to go on our behalf??? Thanks are due to Bert Farrow who, with me, cannot decide who is and who is not the delegate!!! The meetings are on a Sunday and only last 2 hours from 11 to 1.

Volunteers are required to paint and repairand do all new signs etc. For our 1982 Show. Please let me know if you are willing and able. Dave Holiday has already volunteered to help at the 1982 Show. - any other memberswilling please let me know.

The idea of a Breeders Class at each table Show has not been very well supported. Do you realize that, unless you breed your fishes, there is likely to be a shortage. Already certain countries have banned certain species from being caught and exported. The emphasis for the future has got to be on the Breeding of Fishes. This is my main interest in the hobby and many others have thesame oppinion. I would ask you all to breed fishes and to support John Harrison's efforts to maintain a register.

-5-
ARROWANAS

PETER CAPON,

Several years ago whilst talking on the phone to a certain London wholesaler, he mentioned that he had young arrowanas in stock and whilst declining to order them I said that I thought that they were one of the most beautiful of aquatic creatures.

I thought no more of it until whilst unpacking the next delivery from the said wholesaler there was amongst the other fishes a bag marked for my attention containing a young *Osteoglossum bicirrhosum* which was about three inches long and still sporting it's orange-red egg sack. Perhaps this is the point where I ought to voice my thanks for the gift of such an interesting fish - thank you Don Faithfull

I took the arrowana home and installed it in my fish-house in an all glass 12 by 6 by 6 tank, rather small quarters for such a fish but it was the only tank that I had ready with reasonably mature water in it. The fish went into rainwater that had been in the tank for about two weeks straight from it's bag containing I assumed what was basically London tapwater. The characteristics of my water I did not measure but from previous experience I imagine it to have been just faintly acid, say pH 6.5 and with 10 to 20 ppm of hardness. The change of water appeared to have no effect on the arrowana as it proceeded to explore it's new home swimming to and fro with a graceful snake-like motion.

Although the fish still had quite a large yolk sack I decided that I ought to try to get it feeding before this was consumed rather than wait until food became an absolute necessity. It fed sparingly on the proffered blood-worms and fry of *Xiphophorus xiphidium* and *milleri*. Perhaps you might regard this as unusual as a staple diet but the weather was cold and these were the only live food that I could obtain indeed many may regard the use of *X. milleri* and *xiphidium* as food as sacrilege.

The arrowana remained in the small tank for a week whilst I evacuated more suitable quarters - a four foot tank. Whilst in the small tank it actually grew about a quarter of an inch. It was released into it's new quarters by immersing the small tank in the larger and allowing the fish to swim out of it's own accord. The water was as near similar to that in the first tank as possible and the arrowana showed no distress at the change but swam a tour of inspection before taking up station in the shadier portion of the tank.

It continued to feed well but not as heavily as I had expected. I tried to ensure that there was always something for it to eat should it so desire. During the second and third weeks I attempted to get it to eat a well-known brand of flake food, it showed interest snapping at it only to spit it out. On the sixteenth day it did not cruise to the centre of the tank on my approach but hung back in the darkest corner, although it still appeared to swim normally at the surface. At this time the yolk-sack had shrivelled to a tenth of the size that it had been when the fish first came into my possession and now the greater part of it's sustenance must have come from the food that it was still readily taking.

On the nineteenth day something was obviously wrong. The *Osteoglossum* was swimming awkwardly it's snake-like motion was now so exaggerated that the whole body took on a grotesque rolling.....

motion with first one then the other pectoral dipping low below the body. When resting the fish would roll side-ways until almost on it's side before righting itself with a start. No food was taken, but whether because of the difficulty in swimming or though some internal disorder is not known.

The arrowana's condition deteriorated further next day and on the morning of the twenty-first day it was found dead- leaving more questions unanswered than I would have thought possible when I first aquired this most interesting of fishes.

Normally when I aquire a fish new to me I make a point of reading up on it from all the sources available to myself. The following is a synopsis of what I have been able to learn about *Osteoglossum bicirrhosum* and some of it's relations, which perhaps may enable others to successfully rear this fish rather than simply have it die as I did.

The largest of the Osteoglossidae is *Arapaima gigas* which grows to 4.5 metres in length and reaches a weight of 200 Kilograms (about a cwt.- Editor) and at this size is the largest freshwater fish in the world. The scales of this fish are stout bony with a canal-like structure which forms a mosaic. In 1955 D'Aubenton showed that in the African member of the Osteoglossidae family, *Heterotis niloticus*, the curious helical organ on the fourth gill arch is used for filter feeding, plankton are trapped in mucus and thence carried to the stomach. When other food is scarce such as during the dry season this filtered food may well form an important part of the diet. It is assumed that this filter feeding is common to all members of the family. Also it is thought that aerial respiration may be carried out because the swim-bladder opens by way of a duct to the back of the pharynx. In the Essequibo river the natives use the arrowana as bait for catching the Arapaimas which has the local name of Piraracu. Arrowana are impaled on hand forged hooks and attached to a float, when the Arapaima takes the bait it is played until it can be manoeuvred close enough to the canoes for it to be dispatched by arrows or harpoons. This method of catching only seems to succeed where there is little or no current. The Arapaima appear to prefer to lie under a scoured out bank in deep water.

The Osteoglossum that is most likely to be encountered by the aquarist is *Osteoglossum bicirrhosum*. which is also known in some of the earlier literature as *Osteoglossum vandelli*, *C. minus*, *O. arrowana*, and *Ischnosoma bicirrhosum*. The only other true species reported to date is *O. ferreirai* first reported by Kanazawa in Ichthyologica Volume XXXVII in April 1966. *O. ferreirai* was found in the Rio Negro and is named for Alexandre Ferreira the first collector and the discoverer of the Osteoglossids between 1783 and 1792.

Juveniles of *ferreirai* retain their striping up to a length of 100 mm whereas *bicirrhosum* loses its stripes at about 65 mm. The stripe of *ferreirai* is threescales wide wherea on *bicirrhosum* it is only one scale deep, also the former shows white on the upper rays of the caudal whilst *bicirrhosum* has a colourless tail. Photographs of *ferreirai* show a fish that has lost it's egg-sack and exhibits a broad lateral stripe a black anal and horizontal eye bar. Adults of this specias lose the lateral stripe having a brownish body that is paler ventrally, the anal dorsal and pectorals together with the membraneous part of the barbles are black. The.....

basal part of the barbels are white as are the edges of the pectorals and anal fin. The body does not show the checkered effect that is common on *bicirrhosum*. *Osteoglossum bicirrhosum* adults have variable colours on their bodies being basically silvery but showing greenish, yellowish, or greenish hues depending on the individual fish and often the contents of its aquarium by reflection., again the fish is paler ventrally.

The usual arrowana imported into this country is the silver arrowana, *Osteoglossum bicirrhosum*. Although young adults are occasionally offered it is more usual to see young fry up to about three inches long with their orange/red yolk sack still very much in evidence. As imported the fry can live for some time on the food supply in their egg-sack but should be offered daphnia, mosquito larvae, and fish small enough to be swallowed. The manner of collection of the fry in their countries of origin is rather unsavoury to a real fish lover. The male carries the eggs and fry in his mouth in a similar manner to the mouth-brooding cichlids and when fry are wanted for export the father is caught, his head chopped off and the fry removed. The only compensation in this grisly tale is that the fishermen do at least make good use of the decapitated father - they eat it! The silver Arrowana has a wide range it hails from Ecuador, Brazil, Guyana, Venezuela, Peru and Columbia.

The first recorded aquarium spawning took place in 1966 in a tank in the back-room of Tex's Tropical Fish of Long Beach, California under the surveillance of Tex Maupin. It is recorded that six weeks prior to the spawning the male stopped eating and the female consumed twice her normal quota of goldfish. The female in question was six and a half years old and thirty inches long, whilst the male was three and a half years old and had a body size of twenty four inches. Tex noticed the following sex differences, the lower jaw of the male extended up and over the upper part, and his pelvic fins were longer than the females.; the female was obviously heavier in the body. As part of the courtship the male gathered the preferred goldfish in his mouth and then released them near his mate for her to eat. Alternatively he would herd them all towards her. About two weeks before the spawning the female began to refuse food, but now the male began to eat voraciously taking up to a hundred three to four inch goldfish during this time.

As spawning approached both fish circled and shook their heads in a manner reminiscent of some of the larger cichlids, and the female appeared to make a point of always swimming beside the male.

Spawning occurred on an early September evening, in neutral water with a hardness of 18 DH at 70°F in a 360 U.S. gallon tank. The fish spawned in a depression they had made in the gravel and produced about one hundred and fifty eggs. After the spawning both fishes took the eggs in their mouths and resumed swimming near the surface of the water. After several days it was noticed that the female's mouth no longer bulged and it was assumed that she had eaten the eggs. She now became slightly aggressive towards her mate so she was removed.

The first fry were seen to leave the father's mouth after thirty-nine days, they were soon scooped up by him. At this stage they were two inches long and still sported an egg-sack.. After fifty-one days Tex introduced daphnia and brine shrimp adults as the yolk sack had now been absorbed, but there was no sign of the fry.....

continued on page 11

**BREEDING FOR BEGINNERS.
AN EASY ONE TO BREED SIAMESE FIGHTERS (BETTA SPLENDENS).**

TERRY BLACKMORE.

I just happened to have this 15x10x10 tank knocking around with nothing in it, so I thought I'd try breeding something I hadn't tried before. On looking round the fish shed I decided that a pair of fighters was just the thing to try. Ah! I thought fighters dead easy, no problem. How right I was. I placed the male in the tank by himself and left him for a couple of days. The water being Southend tap water, aged for a couple of weeks. The tank had gravel and plenty of Indian Fern and no filtration. Fighters being bubble nest builders a filter would have destroyed any nest he built. The male and female were both fed with plenty of live daphnia, white worms as well as flake food. Two days after the male was placed in the tank the female was added to the tank but confined in a floating jam jar. This is to prevent the male from attacking the female and damaging her. Almost as soon as the male saw the female he tried to get to her through the jar, but soon gave up and commenced to build a large bubble nest which took two days and covered about four square inches of the darkest corner of the tank. The female was then released into the tank.

It wasn't long before he drove her beneath his nest and began mating. This he did by curling his body around the female and squeezing her until three or four eggs dropped from her body, at the same time the male fertilised the eggs with his own milt. On releasing the female he caught the eggs in his mouth, swam up to his nest and spat the eggs into the mass of bubbles. This continued until the female had given up all her eggs. When the mating was over the female was driven away from the nest by the male. The female was removed at this point, as the male will only keep on being aggressive towards the female and in the close confines of a tank she cannot completely escape from the male and he could even have caused enough damage to kill her.

The male remained beneath his nest guarding it (not that there was any danger), repairing it, and collecting any eggs that should fall from the nest in his mouth and spat them back whence they came from.

After 48 hours the eggs began to hatch and the fry could be seen with their tails hanging from the nest. Any fry that dropped from the nest were immediately collected by the male in his mouth and spat back into the nest.

Two days later, with the fry now swimming free of the nest and the possible danger of the male eating his young, he was removed to another tank. The fry were fed on infusoria for the first couple of days and then newly hatched brine shrimp. Gradually the fry grew and began to take fake food and micro worms.

Three week of age is the telling time for all fighters as this is about when the additional breathing apparatus that they need to survive begins to develop. This enables the fish to breathe in the addition of oxygen from above the surface of the water, with which without this species cannot survive as it cannot extract enough oxygen from the water. Many young fighters die at this stage as their respiratory organs do not develop properly.

Continued on page 11.

WHAT'S IN THAT ROCK POOL - A LOAD OF WEED.

CHRIS CHESWRIGHT.

That may be a first impression but if you have a closer look you'll find a great deal of animal life from plant like hydroids to crabs and even fish. This article being on a few of the fish that I have seen and found during my studies at Swansea University. Most of the fish described below are found on the shore at low tide in pools but a few are found in water of about 1 foot in depth. Now on to the fish.

The first type being the gobies, examples I have seen being *Pomatoschistus minutus* and *P. microps*. These, like other gobies have the pelvic fin formed into a sucker in order to attach to rocks and shells, otherwise they could be swept away by the currents in the estuaries in which they live. If you look in the water of a small river running into the sea or in salt creeks, or marshes (such as those at Leigh) you will be sure to see a few of these darting about. These two species are very similar the difference being in the number of fin rays and scales. Both fish are fawn in colour with many blotches and a number of horizontal stripes down the sides, the males during the breeding season become darker (almost black) and the fins take on a blue sheen. The fish lays its eggs under empty mollusc shells in slow flowing water and here the fish remains to guard the eggs until they hatch.

Spinachia spinachia - fifteen spined stickleback. This is much more slender and longer (up to 20 cm) than the three spined stickleback. The body is a brownish green in colour with clear fins, the male becoming blue in the breeding season. It is found in rock pools and down to 10 in. in depth where it is generally found amongst seaweed, its slender shape aiding in camouflaging it amongst the seaweed.

It breeds in shallow water from spring to summer where it builds a nest of woven plant fibres amongst the seaweed. In this are laid 150-200 eggs which are then guarded by the male until they hatch. This fish is said to live for only 2 years so the growth rate must be very great in order to gain a size of 20cm in that time.

Zoarces viviparus. This is a blenny, being closely related to the common blenny found in most rock pools. This species is restricted to coasts in the north, particularly around Scotland (In May I was on the Isle of Great Cumbrae off the West of Scotland and in a study of rock pools a large number of these were found). The common name for these fish is eel pout or viviparous blenny - this means that they give birth to live young. Fertilization is internal, the young fish (of which there are about 300) are born after 4 months development within the ovary.

The fish itself is brown in colour with a few black blotches. It is a long fish (up to 46 cm) with a body tapering towards the tail, the dorsal is long and continuous with the tail.

Trachinus Sp. These are the weever fish, two types being found around our shores, the lesser and greater weevers. They are found in areas of sand in shallow water, where often they remain buried in the sand. They look fairly harmless, resembling the gobies in body shape and colour. But beware as the rays of the dorsal fin and a spine on the gill cover are venomous and when disturbed the weever fish automatically raises them in defence. The venom.....

although not deadly can cause excruciating pain, the best method of alleviating the pain is to apparently immerse the wound in as hot water as is possible for up to half an hour (I don't know which would be worse!) - the venom being destroyed by heat. So beware of this one when collecting.

Pholis. gunnellus- The common name of this fish is the Butter fish and if you've ever tried to catch one you'll know why! It is found all around the British coast from rock pools down to a . . depth of about 40 m. The body is elongated and flattened from side to side. This is a very beautiful fish with brown to red-orange sides with dark mottlings. Along the top of the body and overlapping into the dorsal fin is a row of 9 - 13 black spots, surrounded in white. Breeding occurs during winter from between the tides, in rock pools down to 25 m, the egg masses being guarded by the parents.

Agonus cataphractus - The common name of Pogge is not exactly a beautiful name, and nor is the fish (Unless you like weird and wonderful catfish). It's body is armoured with bony plate and has many barbels around the mouth, used in the location of food. The body is a dirty brown colour. It is a common fish found in shallow water (and rock pools) down to 500 m on sand, mud or rock. In the south it is often found in estuaries. It grows only to 15 cm (6 ins) and is often found fully grown.

Lipuris montagu - A strange looking little fish (7 cm) with an even stranger common name of Montagu's Sea Snail - how it got this name I do not know. Its shape resembles that of the front end of a tadpole. The fish is generally silver shading to white underneath, although males in breeding colour are much darker. These are not very common being found from mid-tide level down to 30m. Due to their small size and colour, which blends with the surroundings it is probable that they are reasonably common its just that they are hard to pick out. This is a particularly nice fish.

So next time you go to the beach, particularly if there are rock pools, don't just lie there burning to a crisp take a walk and sift through a few rock pools - keep your hobby going even on holiday. You will probably find some very beautiful fish (In about one hour up in Scotland looking through rock pools I found 7 species), do return them back to where you found them as they may be guarding eggs. Also make sure you know what you're handling as you don't want to pick up a weever and then realise what it is.

If you do go hunting try not to disturb too much and put rocks back where you found them, otherwise you may cause the death of some creature that was hiding under that rock either by causing it to dry out or make it exposed to predators.

Happy Hunting

*****●●●●*****

TIP OF THE MONTH.

By Terry Wotisname oh yes-Waller.

Don't forget that ANY all glass tank must be supported all over the base not just the edges. It must also sit on a base of Polystyrene. You've been warned.

continued from page 7.

eating.

On the sixty-fourth day the male ate a goldfish, on the sixty-fifth day the fry were observed eating, and on the sixty-seventh day the father accidentally ate two of his off-spring so it was thought wise to remove him.

The fry ate and grew well so that by the end of April 1967, a little over seven months after the spawning the young fish attained eight to ten inches.

Actually, this spawning was not strictly speaking the first recorded spawning for Tex Maupin also had a spawning of Arrowana's in 1964. The parents in this case were five years old and had been conditioned on goldfish and frozen scallops. At this time Tex recorded that the female's ovipositor was an half inch in diameter and that the male's was slightly smaller and more pointed. This spawning took place in water at 82°F, with a pH of 7.0, and a hardness of 8 DH, the tank was fitted with under-gravel filters.

In this case however, neither of the parents attempted to take the eggs into their mouths but just left them in the depression in the sand. After some time the eggs were judged to be infertile.

I trust the foregoing will have been of some help to those of you who might be considering purchasing an Arrowana. The young adults that are very occasionally seen in the shops should be quite easy to rear further provided one is able to supply them with fish and similar fares their only disadvantage being their need for plenty of swimming space and of course the rather high price of these specimens because of the difficulties in shipping and holding them prior to sale. The fry still carrying their egg-sack are a better proposition financially but need skill to rear them - far more than I apparently have.

=====

continued from page 8.

When it was seen that the fish were beginning to fight amongst themselves, they were transferred one each to a jam jar. I had something like .fifty jam jars sitting on a shelf each containing a fighter. The fact that they were in a jam jar seemed in no way to hinder growth up to half an inch. At about this size most of the fry were given away and only a dozen or so of the really best were retained,

I did try to breed from the fry eventually some six months later but unfortunately I went into hospital right in the middle of the breeding. I only had a few days notice and just as I went in the fry became free swimming not being able to give them the proper attention and the correct feeding, unfortunately I lost all the fry, and never did get the chance to try again.

One thing I did not worry about to much was water temperature but in my fish shed this would range from 72 - 85 F during the day at the level where these fish were bred. But the most important thing with fighters is the temperature of the outside air surrounding the tank if this is cold it does not do young fry or parents much good to take in a big guJp of cold air. So when keeping fighters remember that air outside the tank should be very near to that of the water. This naturally goes for all other air breathing fish.

OPEN SHOW REPORT

— Dave Cheswright.

—

I Audrey and I went to the Mid-Sussex A.S. Show on Sunday, 31st May, at Burgess Hill, about 10 miles from Brighton. It is an area of outstanding countryside, with plenty of places to go during Judging, including Kew Gardens and the Bluebell Railway. Places of interest were listed in the Schedule.

We left home at 8.30 a.m. and arrived at 10.15 (75 miles). It poured with rain all the way but by mid-day the sun was out and stayed out helping to make this a good trip. We entered Livebearer, Killies, Barbs and Plants - 13 entries (unlucky for some). The shaking about on the journey meant that we had to clean out nearly all the entries—we always take plenty of water with us as it is not a good idea to use local water which often does not suit fishes from other areas. Having benched we gave a hand to the Show Sec, Tom Tester who was organising a stand for the Southern Livebearers Aquatic Group, of which I am a member. Other stands there were the F.B.A.S. and the Catfish Association of G.B. A local shop had a stand and were also selling fishes, plants, etc.

There were about 630 entries -high as shows go these days -and after judging a large number of the public came in. It would have been an improvement if black polythene had been used to cover the stands, which were 2 tier and looking a bit bare to say the least.

We went out for a couple of hours during judging, had some food and drink and a walk round the town. We were very pleased with our results, winning 1st s in T-AOS Livebearers, Xo-t, Breeders Live-Bearers and Za, Plants, plus 2, 2nd s and 1, 4th. Trophies were in black and white with the Society badge affixed. All winners, 1st s to 4th s, also received foods.

We left the Show at 6.30 and were home at 8.15p.m. Judges were - G.Barkham, Tony Naronha, Derek Lambourne, C.Pannell, Jack Stilwell, Jim Carney, Adrian Blake & W.Ryder.

DUNMOW & D.A.S SHOW was on Sunday, 14th June.

As seems normal they had duly ordered a very hot sunny day and exhibitors ended the day redder than they started.. Audrey and I took Eric Byatt and his son, who were putting on a stand for the local Killiefish Group. Bert and Joan Harrow also turned up. Doug Ridgwell thought he had transport, found he had not, and got there by various trains and an expensive taxi, it takes us only 40 minutes to get there but I hate to think how long Doug was on the road. Bert and Joan offered Doug a lift home, thus saving him a small fortune. the Dunmow benching system to our own, with black polythene behind the tanks.

Classes entered by S.L.A.D.A.S. members were F Killies T, A.O.S. Livebearers and the .Pairs and Breeders classes. There were about 400 entries and no class for Plants, which I think is always a pity.

Readers may think we are show fanatics but, given good weather and the local surroundings, it is always a good day out. We do not hang around during Judging and were away by 12 noon taking a fast 200 yard walk to the nearest Pub, accompanied by Stan Furssedonn and Fred Holding

of Walthamstow A.S. Fred went off to the Restaurant, Stan had no food with him but apparently does not eat anyway as all offers to share with us were refused.. We found a table outside and fed ourselves from various ice cream boxes which are usually in my fish-house with fry in. Audrey often complains when preparing the picnic "all the boxes have gone again". About 1.30 we had another long walk of about 300 yds to the Duck pond behind the Show Hall. Stan soon stole some child's net and was lying prone showing his expertise in catching Sticklebacks - some 30 Prs in a matter of minutes. There were also Carp but the net was too small. On returning to the Show raffle tickets were forced on us (Joan won a pot plant and Bert did not have to wocry about were to put the 4 ft. Tank). Prize-giving started at about 5.15. S.L.A.D.A.S. Winners were:- Bert, 1st and 2nd, class F. Doug, 1st and 4th, class Xb-m, me, 1st, XO-t and 2nd NO-t.

Judges weres- D.Durrant, T.King, G.Brown and others. Best in Show was Bob Thoday, Witham & Braintree A.S., class L Loaches).

By the time you receive this Journal the Show Season will be almost over, further reports in the next Journal, I hope.

=====

ASSOCIATION OF ESSEX AND EAST LONDON AQUATIC SOCIETIES

1). **CONVENTION at ROMFORD**, SUNDAY, 15th November, 1981, 2 to 7 P.M. Tickets are £1 only from Joan or Bert Barrow, and include food. There will be Lectures on Cichlids, Characins, Coldwater fishes and "friends and foes"

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2). **BREEDING REGISTER.** - The association has asked all 10 member Societies to maintain this, recording dates of birth, etc of Species bred by members. This will later be collated and circulated between the Societies so that members can contact each other for advice and fishes.

John Harrison is to keep this for S.L.A.D.A.S. BUT IT DEPENDS ON YOU to give him information.

This is for the benefit of all members, when you breed a Specie will you please give John the date of birth, Specie name and your name. He will ask for progress reports at about 1 month and 3 months BUT PLEASE let him have this, if possible, without him having to chase around. The object is to find out your SUCCESS OR OTHERWISE IN RAISING THE FRY, and to try to find the REASON IF THINGS GO WRONG, ALSO, **you** can refer to the book and FIND SOMEONE WHO HAS BRED A SPECIE YOU WANT TO TRY -Advice and information is essential to breeding fishes. we hope all members will take part in this scheme,

John.

3) The display at Gramphorn's Garden Centre at Chelmsford on Saturday, 12th September, went off very well, most of the 10 Societies. were there and 24. Aquaria, etc were set up. These included Furnished Aquaria, Aquascapes Snakes, a Terrapin, an Axolotyl and a filter demonstration tank. There were classes for children to enter, not well supported with fishes, probably due to the lack of small show tanks. The Rabbits, guineapigs, birds, etc. were very well supported by the children. A thoroughly enjoyable day out. ,,,

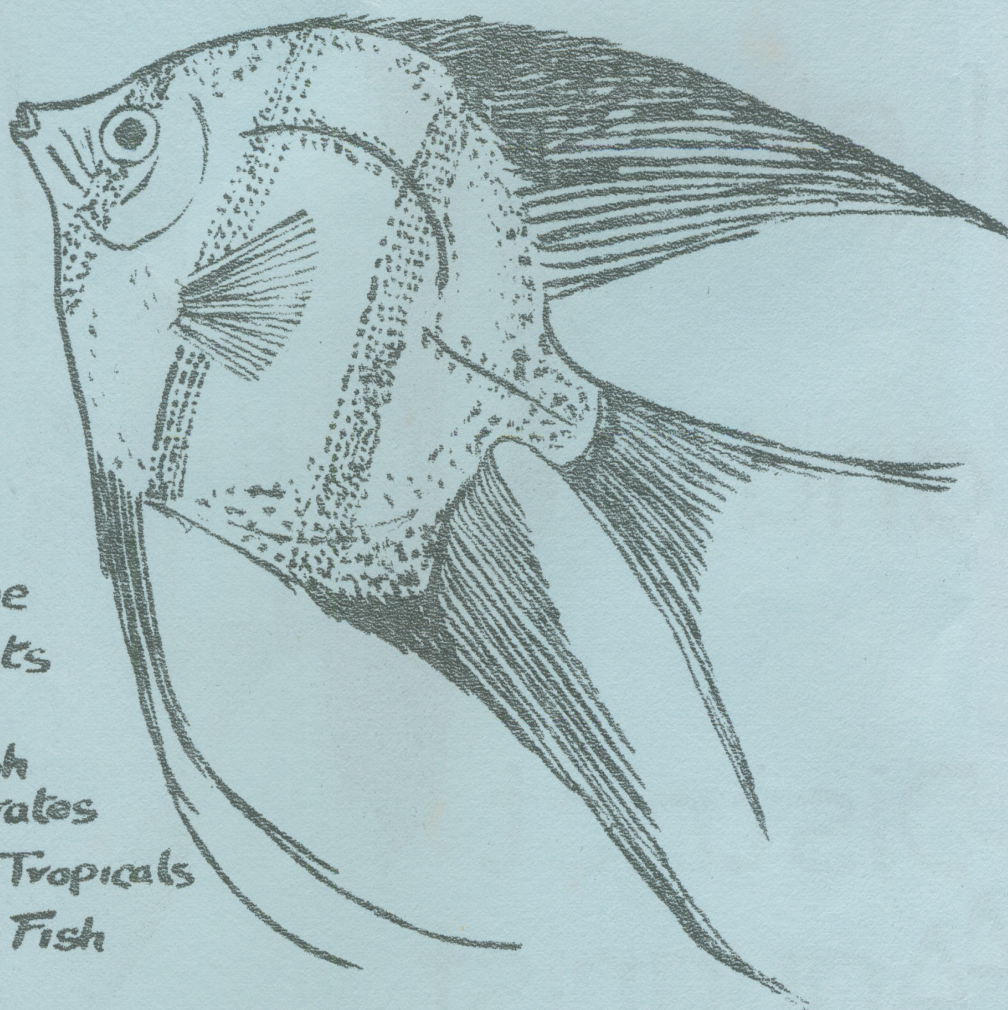
Dave Cheswright.

TABLE SHOW RESULTS-.. Extracted by D.M.C.

- April 21st** . No-t Pairs Livebearers. 3 entries -Judge, Dave Holliday.
 1st - Terry Blackmore- Albino swords - 60 points,
 No-ty 1 entry only - 1st - Terry Gilbey, X.Eiseni - 38 points.
 Nbm Pairs Bgglayers. 6 entries - Judge -Dave Holliday.
 1st - Ralph Neale - Tiger Barbs - 65 points,
 Nbmy 3 entries - 1st - Terry Gilbey - Harlequins - 42 points.
 Aquascapes - NO ENTRIES.
- May 5th** . - T- A.O.S. Livebearers - Judge - Peter Capon. 5 entries.
 1st - Dave Cheswright - P.C.R. Auratus - 85 points,
 Ty 5 entries - 1st, Julian 'Wood, Ameca splendens - 74 points.
 X-T - Breeders Livebearers - 1 entry - Judge - Peter Capon.
 1st, Dave Chegwright - Gambusia marshi - 68 points.
 Herpetology - 5 entries - Judge - Peter Capon.
 1st, Paul Rashbrook - Curly-tailed lizard - 81 points.
- May 19th** . - R - Platys. 3 entries - Judge - Terry Waller. F.B.A.S.
 1st - Ralph Neale - Red Wagtail - 64 points,
 Ry 1 entry - Judge - Terry Waller, F.B.A.S.
 1st , Terry Gilbey - 54 points.
 Xr, Breeders - Platys. 1 entry -
 1st Ralph Neale. 72 points.
 L - Loaches - 5 entries Judge T.W. (again).
 1st , Les Somner - L.Bahi 75 points.
 Ly 4 entries. 1st - Terry Gilbey - Dwarf Loach - 67 points.. .
 House Plants - 6 entries - Judge - T.Waller.
 1st Ralph Neale.- Money plant - 72 points,
 House plant y 3 entries –
 1st , Tony Gilbey - Cactus - 74 points.
- June 2nd.** K - Danios and W.C. Minnows - 13 entries (Terry again).
 1st - Ralph Weale - W.C.M. - 71½ points.
 K -y 12 entries -
 1st - Ralph Pearman - Zebra - 70 points.
 Y - marines - Judged at member's home by Dave Cheswright.
 1st and 2nd (only 2 entries) Dave Holliday, 77 & 75 Points.
- June 16th.** iF- Killies. 3 entries - Judge - Jim -London .
 1st , A.Farrow - -Aph`.georgiae - 82 points.
 XF - Breeders Killies - 1 entry -
 1st - A.Farrow - Aphy. georgiae - 84 points.
 Minitanks. 1 entry - Judge - Jim Condon.
 1st - Les Somner - 91 points.
 Minitanks -y - 4 entries..
 1st - Terry Gilbey - 74 points,
- July 7th,** Z - plants. 2 entries - Judge Derek Durrant, F.B.A.S.
 1st - Ron Davis - Dwarf Cyptocoryne - 75 points,
 Z -y 5 entries - 1st Terry Gilbey- Indian Fern-70 Points.
 Members Challenge was also judged by Derek.
 Pond Competition - 5 entries - Judges -A,,Farrow D.Burgess.
 1st - Dave Cheswright- 76 points.
 2nd - -Ron Davis 74 points
 3rd - Dave Holday 71 points
 4th - Jim London 65 points

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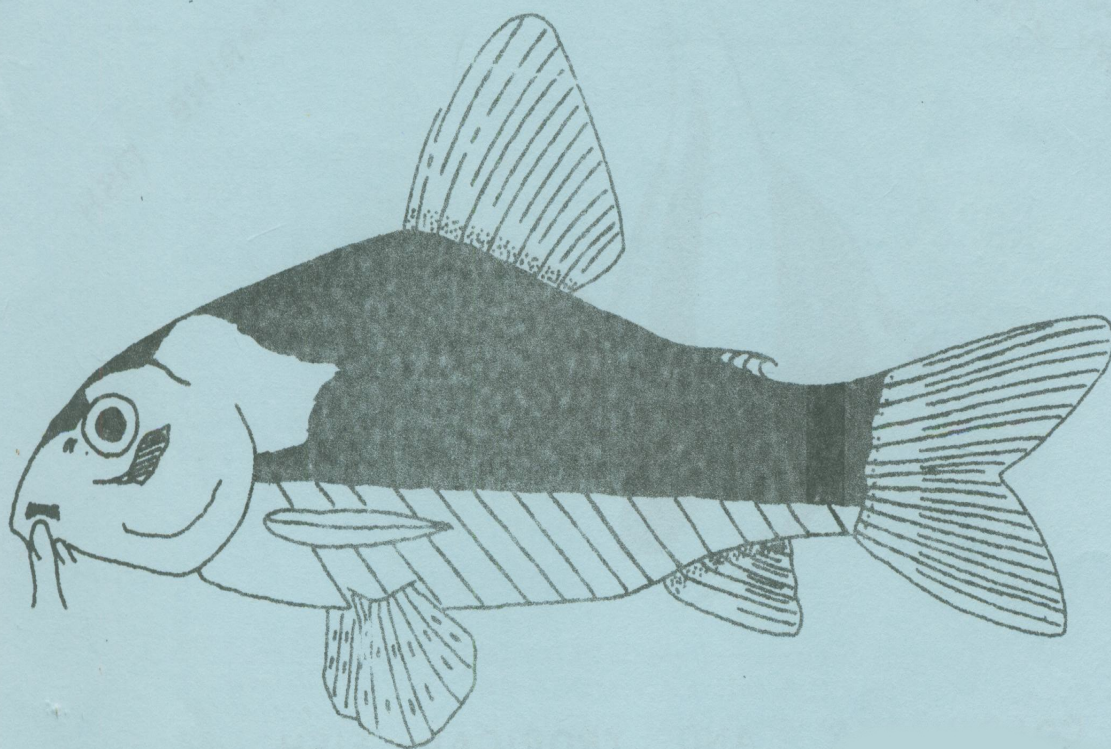
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**BI-MONTHLY JOURNAL No. 86
NOVEMBER - DECEMBER 1981**

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EDITORIAL

HI,

Welcome to the Christmas edition of the SLADAS Journal. As the new Editor I would like to say thanks to Terry Blackmore for supporting the Journal as acting Editor this year? and also to Paul Boore for all the printing and getting the Journal together ready for sale. THANKS .GUYS !!

Back to the New Year Journal. Please keep all articles flowing in anything that you think may be of interest to the other members and of course practical breeding experience. As we are trying to get more members involved in breeding? I have entered an article in the Journal written by Terry Waller on "Breeding Zebra Danio's" which he and many other aquarists recommend for beginners. If you do attempt breeding the danios or any other fish don't forget to put your entry in the Breeders Register, which is being kept by John Harrison. also you can refer to the register for other members breeding experience. Two Trophies will be awarded at the end of the year for the Best Bred Egglayer and Livebearer, so try-and devote a bit of time and effort into breeding, and don't forget there is also the Meritorious Breeding Trophy for the most deserving fish bred.

Other articles included in this issue are, Terry Blackmore's humour on fish keeping, A.G.M. Report, coverage of the Essex and East London Convention?, results from the Diss Open Show, plus other extras.

I would like to take this opportunity in wishing all our readers a very Happy Christmas and Best Wishes for the New Year, and lets make 1982.a year for breeding at SLADAS, (fish breeding only please not human).

Jacky Harrison EDITOR

PRESIDENT'S NOTES

DAVE CHESWRIGHT

As my position will be Open Show Secretary for 1982, I take this opportunity to plug the date, SATURDAY 1st MAY 1982, and beg the support and work of as many Members as possible. I will be calling an Open Show discussion meeting soon and would like to know before I call it roughly who is willing to lend a hand, both before and after and on the date of the show. The hall St. Clements, Leigh-on-Sea as 1981 is booked so it is all systems go.

Please support the efforts, of John Harrison in keeping a Register of Species bred by Members.

Over to fishes - my new fish-house is now 18 months old and is going well. We keep basically Livebearers and Killie fishes which go well together at the lower part of the 70's F. temperature range. The cost of heating is high and this is one way of keeping the total down. Do you realise that in the wild even in Africa and S. America the temperatures do not remain constant and in particular do not stay in the high 70's low 80's F all the time.. Do you realise that in Mexico? where many Livebearers started their existence there can be cold nights with even a little ice. Even in the jungles ponds and small streams are very sheltered and hidden and the sun does not "boil" the water. In large Rivers the depth at which fishes are indicates the temperature they require. It can be quite cool by "tropical" standards even 2/3 feet below the surface. Obviously, even in our summer, temperatures in the fish-house go up but at no cost to the Aquarist.

Do you operate filters and also undertake regular water changes of more than about 10% every week or so? Do you find this more like work than a hobby? If you are using good filters the need for water changes is reduced, obviously if you have the time, it is a good idea essential in small aquaria but the larger the container the less need there is for water changes and you must not think that it is a MUST to do these changes on a regular basis. I and others would say that even without filtration if you can change 10% or so of the water every month in tanks of 2 feet upwards this is quite sufficient, unless you have few tanks and plenty of time. The thing to think of is "little and often" even a few pints changed is a help and does not require much in the way of effort. In my own case over many years and with a large number of aquaria without filters but with plenty of plant growth I find that infrequent water changes do not harm. If you have fry or you want very fast growth I find water changing helps but there is no need to carry this to excess and the emphasis on water changes appears to me to have taken over from the importance of general care and maintenance and the breeding of fishes. I have known Aquarists who have stayed up into the early hours because they thought that a very large part of the water HAD to be changed on a certain day each week. This sort of attitude is likely to turn people off of fish-keeping.

To summarise I would say keep your tanks clean change some water now and again when you feel like it or have the time and concentration on the enjoyment of your fishes and on the breeding.

HOW WE ALL BECAME EXPERT FISH KEEPERS

TERRY BLAGKMORE

Being a fish keeping nut doesn't actually mean that you are a raving looney, but sometimes it certainly does help. What other stupid berk would want to go through some of the idiotic antics that we fish fiends go through to become experts in our hobby.. Some of them are really ridiculous, so lets start at the beginning.

THE FISH SHOP, OR AQUATIC PARLOUR OR WHATEVER ITS CALLED

In we go then with a bunch of fivers flapping in the breeze as we wave them under the nose of "Shifty Sid" the owner. Who gleefully rubbing his hands together, while thinking, here comes another mug to fleece.

Tank Sir? Yes I've just the job, fifteen foot only £350 (he always, dives in at the deep end first, does Sid) Oh! too expensive, how about this one then, 10ft only £200 Ah! a bit on the big side is it Sir? I see you'd like one about 3ft? (dissappointedly thinking I'll have to bump it up somehow). I'll get out all the other items you need sir. We have a few special offers this week (you'll offer the .money and I'll take it), naturally this doesn't refer to all shop owners, but believe it or not there are a few around? I've seen them operating.

Well thats fifty or more quid gone for a starters? and about fifteen quid of it waste,? besides what could have been saved by not buying Sids most expensive equipment the fifteen quid,

AT HOME - THE TANK

The tank is situated where the owner thinks it will look it's best, more often than not its the worst possible place, behind the tele or granny's armchair, so that you have to climb all over her or kick her to one side before you can have a look-see; usually its in the darkest corner of the room.

WASHING THE GRAVEL

Oh calamity Wife's washing up bowl a handy size (that's the first foot into the dog louse with more to follow), and the supposedly clean gravel is washed. Its just as Black as ever it was and what a mess, water all over the kitchen floor, all down .your trousers, in your shoes. Well perhaps you wouldn't have made it anyway, even .f you could have waited, and the gravel it's everywhere, in the sink, over the floor in the towel, under your finger nails, up your nose, in your ears but none in the bowl. God what a mess! mind you he won't help you clear it up so you can get off your knees. Wifey will soon put you back down again when she sees the mess, if you are lucky she won't use the rolling pin.

FILLING THE TANK

This is the best bit. In goes the gravel, CRASH! Half a tank of soggy wet gravel is dumped out of the bowl into the tank, Oh! I wonder what it's doing on the floor? well would you Adam and Eve it that's a lot of good the bottoms fallen out.! I'll lake it back and complain, maybe Shifty Sid will change it or maybe he won't, so hard luck if not. If the tank survives this very careful and tender treatment the gravel is spread lovingly around the tank. Blast It! I've forgotten to put in the inder gravel filter, still I'll shove all the gravel down one end and then shove it .in. Shove it in is the correct phrase here as we all know from experience this doesn't work at all well, as gravel does it's level best to slide back down the tank

BREEDING ZEBRA DANIOS
(Brachydanio rerio)

T. WALLER

This fish really is a very easy fish to breed and makes an ideal first fish for the beginner to breed.

1. Minimum of special equipment
2. Easy to sex (female is very plump)
- 3 Easy to spawn
- 4 Easy to raise

Many fish have been around for a long time and for that reason we rather take them for granted and gradually they get pushed to the back and forgotten- The Zebra is one of these, it is totally unfair because here we have a magnificent community tank fish. Its manners are impeccable, it eats anything, grows to 2" and breeds easy.

They live in large shoals all down East India in paddy fields and slow moving water. They are 2" long in the body and carry barbels, horizontal stripes of royal blue on a basic goldy colour makes them very attractive. The stripes extend into the tail and are present in the anal fin as well. Good specimens have no break in the lines and a good spread to the caudal fin. As these are shoaling, very active fish their metabolism is quite high so they need regular feeding and not too high a temperature 72°F is ideal.

All foods are eaten, but if you want a prize specimen or a well roed female to breed then a certain amount of live food must be fed once or twice a week. Daphnia, tubifex, glass worm or white worm, combine, with a diet of ox heart? crushed pea and a good flake and soon your Zebra will be a winner. A lot of Danio's suffer from inflamed gill covers. This is caused by the gills overworking because of the lack of oxygen in the water, so remember to keep the water clean and the airstone or filter going actively. To spawn this fish you need:-

MALE FISH

FEMALE FISH

A SMALL TANK (CLEAR BASE)

SOME MARBLES

Shoal spawning using more males than females is proffered, but good results are obtained by using just a male and female. The fish are fed well and have regular water changes over a period of about 10 days. This brings the fish into breeding condition, now separate the females (the plump ones) from the male (the slender one) this is best done by placing the males in one tank and the females left where they are. Prepare the spawning tank. This is a small tank about 12x 8 x 8 or 14 x 10 x 10 a clear base is important, cover- the base with marbles and put about 2½ inches of water into it. Danios will eat the eggs so the marbles save them and the shallow water does not give the fish enough time to get the eggs as they drop. The clear base is so that you can check for eggs by pulling the tank half way over the shelf and looking up through the bottom. After being separated for 2 or 3 days put the females into the breeding tank followed by the males a few hours later, usually a wild chase starts with the fish dashing about chasing each other. Next day check for eggs as explained and keep checking for the next 4 or 5 days. If you see.....

HOW WE ALL BECAME EXPERT FISH KEEPERS Cont/d from P.5

again and with a small amount of gravel under its edge the filter will never be seated properly in the tank. Now for the rocks. Thud Thud Thud Crash "Hello Sid", its me again.

NOW FOR THE WET STUFF

Wifey, "You great goon (or other more unprintable profanities of four letters) look at the mess, you've ruined the carpets, fancy dropping a bucket of ruddy water. It'll take mo hours to clean it up. And look at that tank what a dirty YUK! how do you expect the fish to see where their going." Hubby very sheepishly but trying to sound confident "The filter will clear it up quickly dear".

Time to plug everything in FLASH BANG OUCH, Hello Sid, when I plugged in!!!!!! Perhaps maybe you shouldn't have twisted these two bare wires together in the plug or perhaps all that water should have been cleared up first. Having survived electrocution and the possibility of a heart attack and all the mess is cleared up and the tank is in proper working order at last, in goes the plants. Many of which are held down by lead weights, as we all know fish really love water with a high lead content and can often be found basking on their backs under the gro-lux lighting trying for a superb sun tan-. There are many other wonderful ways of getting fish in. this superb condition, like not putting them in quarantine after purchase and allowing them to develop all those lovely white spots. Some even take over the role of Santa Claus and don white beards, and go around spreading unwanted gifts to the rest of the fish.. Other ways include introducing drugs to the water. Ever :tried too many sleepy tabs, not too good for you, neither is too much "Cure everything for fish". Mind-you it often gives the water a lovely deep blue colour, which is okay, as long as it doesn't clash with the wall paper, which once again will upset wifey.

Hello Sid, its me again! Can I have some fish and is there a local club?. Maybe they can help me sort out some of my problems. Now that's the first sensible thing you've done so far.

Glad to see you joined.

BREEDING ZEBRA DANIOS

Cont//d from p.6

nothing take the fish out and start again.. When you see eggs take out the adult fish and wait, 2 or 3 days later the eggs hatch and a day later the fry can be seen in the water darting about. They are very small so they need small, food as a starter. Brine shrimp is the best but if you are not able to provide it then you can resort to Liquifry. Remember you have only 2½ inches of water and this is not enough for the 60 or so fry you have probably got, you must increase your volume of water to avoid pollution. Take a pint of water the same temperature and drip about 4 drops of Liquifry into it, then very slowly run it into the tank of babies. Repeat this every day for a week when the tank will be full but the babies will have grown. Syphon some off and top up and now start feeding foods like crushed flake, crushed pea and if possible micro worm. Repeat this water change and feeding a further 10 days by which time you must move the fish into a bigger tank, at the same time culling out the ones that have grown very little and any odd shaped ones. Zebra Danios grow very fast but keep an eye on them as they grow, removing bad ones or runts and eventually you will end up with a couple of dozen lovely fish that you can really call your own.

FISH OF THE MONTH

BLOODFINS

SCIENTIFIC NAME	APHYOCHARAX RUBRIPINNIS
RANGE	ROSARIO ARGENTINA
SIZE	Breeds at 1½ inches
TEMPERAMENT-	A mild mannered species highly desirable in a community tank.
WATER CONDITIONS	Temperature 65-85°F pH 7-2 to 7-4
BREEDING	Easy to breed long tank, clear shallow water use only plump females, floating plant and a marble base required
COLOURATION	Body silvery grey-blue the dor sal, ventrals, anal and forward portion of the tail are bright red, the edges of these fins being clear. The ventrals and anal are tipped white.
SHOWING	Class C F.B.A.S Show Size 2¼ inches.

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For breeding the tank should be filled with fresh tap water, allow; to stand for 48 hrs, plant the tank very' thickly with short Indian Fern or other wide spreading leafy plants. Breeding takes place in the early morning under good light, the pair chasing each other and finally leaping from the water. Their bodies come into contact above the surface, when numerous eggs are discharged and fertilized. These sink to the bottom and remain hidden among the low foliage. If floating plant is in the tank the fish will sometimes wriggle into it to spawn, without leaping from the water. Immediately spawning has finished the pair should be removed as they are likely to eat every egg they can find. The eggs hatch 48 hours, fry hang on 1 day?, free swimming 4th day. FOOD 1st week Infusoria, 2nd week Infusoria and brine shrimp.

THE QUIESCENT CATFISH

Flashing gaudily in the light,
My little fishes spend the night
The betta gobbles the poor little gup
While cichlids tangle in the muck
The angels glide through forests of green,
As the kuhli loach lurks unseen,
But the solemn catfish, weary and wise,
Sits and watches with rolling eyes.

Pam Dumpert

DISS OPEN SHOW AND RESULTS

As most of you know this was a club outing to Diss, which turned out to be a great day out for all who went. Also for people entering in the show it was quite successful. Results in a moment. The day actually started early morning, at a bus stop waiting for the coach, we all managed to get comfortable and warm on the coach with only one seat to spare. We arrived a Diss approx. 11 o'clock, benched all our fish, had a cuppa tea and then went down to the local fish farm. This place was. very impressive, there was a very good variety of Tropical Fish, all reasonably priced, and a wide range of accessories and books were available. Also the club was given a 10% discount on all purchases. Outside there were gardens, rockeries and ponds everywhere. Some of the Koi were enormous and selling at £125 each. But everywhere was neatly kept, all the shrubs and plants were well looked after and the water in the ponds was crystal clear.

After lunch the coach driver took us to Bressingham, this is where Traction and steam Engines are kept. There was four engines that .you could..actually ride on, and very cheaply. The ride took about 15 minutes, and it took you through the grounds where all the flowers and shrubs are grown. We spent a couple of hours there, then we went back to the show for another cup of te,? results and prize giving. At the show they had side attractions. Dave Holliday tried hard to win a teddy bear, with no success, so I think we will be having this stall at our show. Perhaps he will have more luck there, you never know perhaps we might be able to find something else cuddly for him to win. Other attractions were S.L.A.G. set up by Dave Cheswright and another stand called "Cichlid World" they were selling some Dwarf Cichlids quite cheaply. You was allowed to de-bench before prize giving and the results were as followss-

T. WALLER	1 st	Ag.	FURNISH
S. MACKENZIE	2 nd	Ag	FURNISH
A. WALLER	1 st	C	CHARACINS
A. WALLER	4 th	C	CHARACINS
S. BORE	1 st	H	CORYDORAS
A. WALLER	3 rd	H	CORYDORAS
P. MANSFIELD	4 th	G	CATFISH
A. WALLER	3 rd	P	F/GUPPY
L. SOMNER	3 rd	L	LOACH
L SOMNER	2 nd	Ma	LABEOS
P. MANSFIELD	2 nd	Nb-m	Pr EGG LAYERS
J. HARRISON	4 th	S	MOLLIES
D. CHESWRIGHT	1 st 2 nd 3 rd 4 th	T	A.O.S. L/BEARERS
D. CHESWRIGHT	1 st 2 nd 3 rd	No-t	Pr. L/BEARERS
D. CHESWRIGHT	3 rd	XOT	Br. L/BEARERS

DAVE CHESWRIGHT was also awarded for Best Pair.

A very successful day for S.L.A.D.A.S. well done to all competitors. The club is hoping to arrange another outing like this one, and we hope you will support it again. Thanks were made to Tony Cooper from the committee for arrangements made for the outing, a very enjoyable day out.

**. ESSEX & EAST LONDON CONVENTION ' - SPEAKER IAN SELICK
CICHLIDS OF THE WORLD.**

The convention opened with a talk and slides on Cichlids of the world. The speaker on this subject was Ian Sellick, who is the General Secretary to the Cichlid Association. Ian is also an adviser to the Aquarist magazine. He began his talk with Dwarf Cichlids, and in particular the *Apistogramma* species, and I was astonished to learn that there are 36 different Dwarf Cichlids named under this Genus. We were shown a large variety of slides of *Apistogramma*.. and Ian spoke of their habits. It was very interesting to see slides of some of the fish you do not seem to be able to find in the shops in this country. One very good tip that Ian gave was that when purchasing *Apistogramma ramirezi* buy small juvenile fish rather than the biggest one's you can find, as the adult Rams do not seem to travel well and tend to kick the bucket after you've had them a week or two, whereas the young Rams do not seem to be upset so much by the journey and are more adaptable to the water conditions allocated for them.

Next he moved onto the genus "Cichlasoma" and a very wide range of fish are covered by this genus, to mention just a few well known ones, Jack Dempsey, Fire-mouths and Convicts and quite a few I couldn't even say let alone spell. There were two new fish Ian mentioned that are making an appearance in this country's *Cichlosoma festae* and *Cichlasoma maculicaudo*. The *C. festae* is said, to be very colourful but the information on this fish is very limited at this time but hopefully more will become known of this fish as it becomes more readily available in this country. *C. maculicaudo* or Black Bolt as it is more commonly known is a very colourful fish. The body of this fish is an iridescent blue, and the caudal and anal fins are red, there is a black belt running vertically down the body. Ian showed us a slide of *C. Maculicaudo* and it really was stunning in colour. However, do not be put off if you see a juvenile specimen as it looks rather drab, it is only pale fawn in colour and the only distinguishing mark is a spot on the base of the caudal fin, but the colours described previously become more apparent with maturity. Remarkably this fish will live in almost any water condition and grows to an average size for cichlids approx. 10 inches, and it is not aggressive.

Unfortunately time ran out for Ian and the talk on Rift Valley Cichlids is I think being booked for a later date

Reported by J & J Harrison

ANNUAL GENERAL MEETING

The A.G.M. was held on the 1st December, and all went very smoothly with all positions filled. Minutes from 1980's A.G.M. were read, also Secretary and Treasurers report, all three items were approved and signed.

MATTERS ARISING IN BRIEF:-

Our President for last year, Dave Cheswright, mentioned that although our Open Show was well supported he would like to see more entries for May 82.

Table Show Results Result stickers were not being displayed on the tanks, this has now been put to our new Table Show Secretary, who will now see that this is carried out.

Paul Boore has donated a spectacular Trophy, to be awarded to the highest pointed Senior, and will be presented for this year.

Jim London has not been at our club lately, Jim has been very tied up with work also he has devoted a lot of time to Koi Breeding. I understand that Jim is planning a Koi talk for later on in the year, at SLADAS.

Many thanks to Dave Holliday, Tony Cooper and Terry Blackmore, who served on the Committee this year, and have declined positions for 82, giving us three new members.

COMMITTEE ELECTED AS FOLLOWS:-

PRESIDENT	DAVE BURGESS
VICE PRESIDENT	BERT FARROW
HON. SECRETARY	JOHN HARRISON
HON. TREASURER	JOAN FARROW
EDITOR	JACKY HARRISON
ASS. EDITOR	PAUL MANSFIELD
TABLE SHOW SECRETARY	KAREN TURNER
P.R.O.	PAUL BOORE
LIBRARIAN	DAVE CHESWRIGHT
SOCIAL SECRETARY	JANET MACKENZIE
CATERING SECRETARY	AUDREY CHESWRIGHT
COMMITTEE MEMBER	LES SOMNER

Dave Cheswright has been appointed Open Show Secretary for 1982-Sтивен Mackenzie is now Junior Committee Representative.

NEWS EXTRA

TABLE SHOWS

JANUARY PROGRAMME:-

JAN 5 **SPEAKER - LIVEBEARERS**
 T/S 0 - MALE GUPPIES
 P- - FEMALE GUPPIES
JAN 19 **FBAS TAPE/SLIDES**
 T/S EA - FIGHTERS
 Ez - AOS LABRYNTHS :

JOURNAL EXCHANGES:

Fish forum No's 59 and 60 from Basingstoke A.S. are now available from the Library. These make interesting reading, giving us an idea of what other clubs are up to.

NEW SHOP

Dave Burges advised us of a new Aquatic Shop on the main road between Billericay and Shenfield (727 Rayleigh Rd5 Hutton) the place is called "Burgess Nursery" no connection with Dave please ask Dave for his opinion on this place. John and I went up there and had a look around, we were quite impressed with what we saw, all the tanks and fish were very clean, well worth a visit- We had a chat with the owner, and he said that if there was something you wanted in particular and he hadn't got it at that time, please tell him and he would bring it in for you, so please ask as it will also help him to find out what the public want. ..A discount has been sorted out for SLADAS members, proof of membership must be shown i.e. club badge or card. Opening times are Tuesday to Sunday inclusive, closed all day Monday.

ESSEX AND EAST LONDON CONVENTION

The convention was a very successful day, refreshments -were laid on, and they held a raffle, prizes consisted of a 30" tank, Eheim Power Filter, 150watt Heater /Stat, Basket of Fruit and bars of chocolate. The E & E.L.A.S. is now considering holding a convention every 6 months- Do try and go along to the next one, as the knowledge to be gained from the speakers is very beneficial.

An article from the convention has been entered in this issue, and another one will appear in the next Journal.

CATFISH ASSOCIATION OF GREAT BRITAIN

The C.A.G.B. held its annual convention last month which was attended by Paul and Sean Boore, John and myself. Please look for a full report in the next Journal. Membership forms for the Catfish Association can be obtained from the P.R.O
Paul Boore

INFORMATION PAGE TIP OF THE MOUTH

How to clean organic debris from under the plates of an undergravel filter .without tearing down the aquarium.

Remove the elbow from the top of one riser tube and remove the air line. Insert the siphon hose as far as possible down the riser tube. Start the siphon running into either a bucket or out of the window and into your flower garden (the water and organic matter siphoned out v/ill make an excellent garcfen fertilizer). When $\frac{1}{4}$ to $\frac{1}{2}$ of the water has been removed from the tank the job will be done. If the siphon hose diameter is as large as possible and the exit end of the hose is held far enough below the aquarium, all of the debris will be sucked out from under the filter without disturbing the biological filter bed. This method will also draw some of the finely divided organic matter out of the gravel, through the holes in the filter plate and out of the tank, thus helping to rejuvenate the circulation of the water through the filter and restoring some of the filters effectiveness.

SPECIALIST SOCIETIES

S.L.A.G. Livebearerss See Dave Cheswright.

BRITISH DISCUS ASSOCIATION? s.a.e. to L. Dann,-52 Beechview Rd, Kingsley, Warrington Cheshire. WA6 8DG

CATFISH ASSOCIATION OF GREAT BRITAIN s-a-e- to Mr. J Carpenter,10 Thornbank Close, Stanwell Moor, Staines, Middx.

BRITISH KOI-KEEPERS SOCIETY s.a.e. to Mrs Mullins, Woodlands. South Ave, Langdon Hills, Basildon. Essex.

BRITISH CICHLID ASSOCIATION 20p. stamp .for details and free .samples .of publications to I.C. Sellick, 16 Kingsley Rd, Redland, Bristol. BS6 6AF

BRITISH KILLIE ASSOCIATION s.a-e. to B.A. Brown- 173 Parr Lane, Bury.

Further details of these associations can be obtained from the above addresses, also they will advise you if there is an Essex area group for your Specialist Society.

If anyone has details of any other Societies, can you please let,.me have the details and I can then mention them in other Journals.

Once again I am asking for articles for the Journal, as we are in short supply of people writing for us.

EDITOR

TABLE SHOW RESULTS

21st JULY 81

CLASS W - SINGLETAIL GOLDFISH 10 ENTRIES

1 st	D. HOLLIDAY	GOLDFISH	74½ Points
2 nd	D. HOLLIDAY	GOLDFISH	72½ Points
3 rd	I. ARCHER	SHUBUNKIN	72 Points
4 th	D. DURRANT.	GOLDFISH	68½ Points

JUDGE- D. CHESWRIGHT

CLASS V - TWINTAIL GOLDFISH 4 ENTRIES

1 st	D. DURRANT	FANTAIL	71 Points
2 nd	D. HOLLIDAY	FANTAIL	62 Points
3 rd	D. HOLLIDAY	FANTAIL	60 Points
4 th	D. HOLLIDAY	FANTAIL	56 Points

JUDGE D. CHESWRIGHT

CLASS W - AOS COLDWATER 5 ENTRIES

1 st	D. HOLLIDAY	BITTERLING	68 Points
2 nd	P. RASHBROOK	BULLHEAD CATFISH	60 Points
3 rd	P. RASHBROOK	KOI	52 Points

JUDGE D. CHESWRIGHT

CLASS Wy - AOS COLDWATER JNR 1 ENTRY

1st	S. MACKENZIE	BITTERLING	62 Points
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JUDGE D. CHESWRIGHT

CLASS Vy - NO ENTRIES

2 MEDALS GIVEN

4th AUGUST 81

10 ENTRIES

CLASS C - CHARACINS

1 st	A. COOPER	BLIND CAVE FISH	83. Points
2 nd	L. SOMNER	HATCHET	80 Points
3 rd	A. MAKSFIELD	SILVER TIP	77 Points
4 th	DC BUSH	EMPEROR TETRA	76 Points

CLASS Cy- CHARACINS JNR NO ENTRIES

CLASS M - AOS EGGLAYERS 5 ENTRIES

1st	P. RASHBROOK	ROPE EEL	78 Points
2nd	Po RASHBROOK	AFRICAN GOBY	77 Points
3rd	L. SOMNER	RUBY SHARK	76 Points
4th	L. SOMNER	BUTTERFLY FISH	73 Points

CLASS MY - AOS EGGLAYERS JNR 1 ENTRY

1st	R. PEARMAN	SUCKING LOACH	74 Points
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3 MEDALS GIVEN

TABLE SHOW RESULTS

18th AUGUST 81

CLASS K KILLIES

7 ENTRIES

JUDGE S. BROWN

1 st	C. CHESWRIGHT	SLADAS	A. SPOORBERG	76 Points
2 nd	C. CHESWRIGHT	SLADAS	A STRIATUM	74 Points
3 rd	A. FARROW	SLADAS	A. GEORGIAE	73 Points
4 th	A. MEECH	WITHAM	A. ICATANGAE	68 Points

CLASS JK - DANIOS RASBORAS, MINNOWS 10 ENTRIES

1 st	R. THODAY	WITHAM	R. BALIENSIS	79 Points
2 nd	R. THODAY	WITHAM	KERRI DANIO	76 Points
3 rd	A FARROW	SLADAS	R HETERMORPHA	75 Points
4 th	R. THODAY	WITHAM	R. RETICULATUS	74½ Points

CLASS T - AOS LIVEBEARERS 10 ENTRIES

JUDGE S. BROWN

1 st	D. CHESWRIGHT	SLADAS	B RHABOPHORA	60½ Points
2 nd	K. TURNER	SLADAS	P. VERSICOLOR	60 Points
3 rd	A. MEECH	WITHAM	P. ZOHATA (FEMALE)	59½ Points
4 th	A. MEECH	WITHAM	J. LINEATA	59 Points

CLASS Xb-m BREEDERS EGGLAYERS 9 ENTRIES JUDGES- R. BOWER

1 st	D. RIDGEWELL	SLADAS	T. PUMILUS	61 Points
2 nd	B. THODAY	WTTHAM	J. DICKFIELD	58½ Points
3 rd	D. SURGES	SLADAS	ANGELS	58 Points
4 th	B. THODAY	WITHAM	A. WEISEI	57½ Points

CLASS Xo-t -'BREEDERS LIVEBEARERS 11 ENTRIES JUDGE- R. BOWER

1 st	A. MEECH	WITHAM	B. RHABOPHORA	60½ points
2 nd	D. CHESWRIGHT	SLADAS	P.C.R. AURATUS	60 points
3 rd	A. MEECH	WITHAM	P. CAUDOMACULATA	59½ points
4 th	A. MEECH	WITHAM	Co STUARTI	59 points

INTERCLUB TOTAL POINTS :-

WITHAM & BRAINTREE	34 POINTS
S.L.A.D.A.S.	36 POINTS

1st SEPTEMBER 81

CLASS BREEDERS EGGLAYERS 3 ENTRIES

JUDGE- P. CAPON

1 st	P. MANSFIELD	TIGER BARBS	77 Points
2 nd	D. BURGES	ANGELS	69 Points
3 rd	P. MANSFIELD	ANGELS	65 Points

CLASS Xo-t - BREEDERS LIVEBEARERS 1 ENTRY

JUDGE- P. CAPON

1 st	R. NEALE	PLATY	67 Points
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CLASS Xo-ty - BREEDERS LIVEBEARERS JNR 2 ENTRIES JUDGE- P. CAPON

1 st	TERRY GILBEY	X.EISENI	66 Points
2 nd	TERRY GILBEY	X.EISENI	65 Points

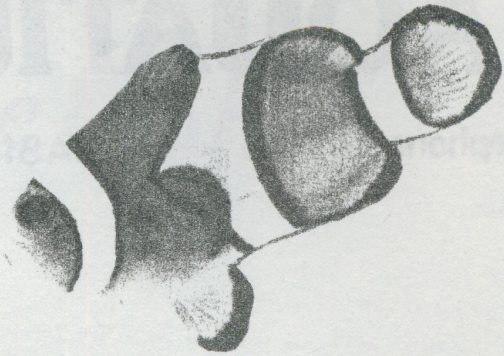
CLUB SHOW TROPHIES.

As I have had several people complaining that they think that they should have been trophy winners last year and did not receive a trophy, I have listed all the trophies and whether they can be won by either Junior or Senior. I hope that this will settle any arguments that, may arise this year. Where the trophy goes to the best of a class which includes Junior and Senior fish the highest pointed fish from both classes will win the trophy, unless the Judges decide otherwise,,

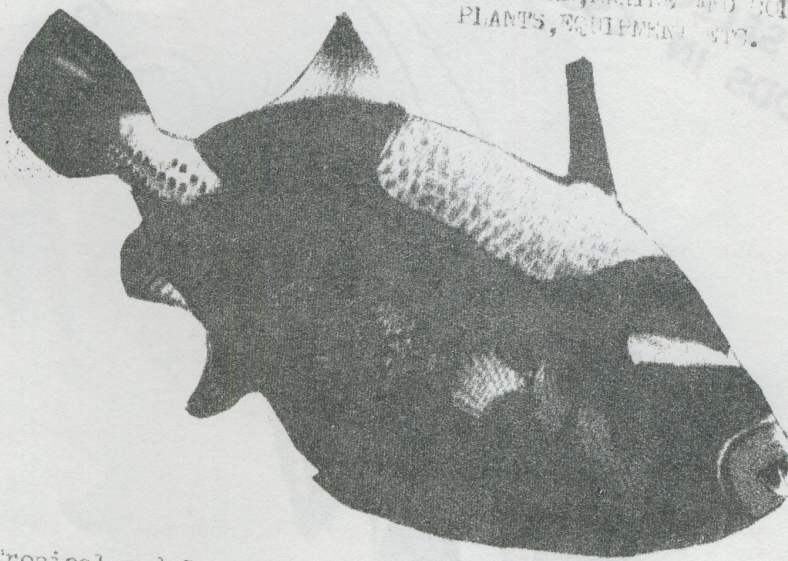
DUBOISSON CUP	BEST CHARACIN	JUNIOR/SENIOR
LEN WILLIS CUP.	BEST KILLIFISH.	JUNIOR/SENIOR
STAN HYDE CUP'.	BEST CORYDORAS/BROCHIS	JUNIOR/SENIOR
WINDERMERE CUP.	BEST MARINE	JUNIOR/SENIOR
S.L.A.D.A.S. 4.	BEST COLDWATER	JUNIOR/SENIOR.
SAUNDERS-CUP.	BEST COLDWATER R.U.	JUNIOR/SENIOR
BARNES-OAKE CUP.	BEST Xb-m EGGLAYERS.	JUNIOR/SENIOR
CORONATION CUP.	BEST Xo-t LIVEBEARERS.	JUNIOR/SENIOR
S.L.A.D.A.S. 1.	BEST A.O.S. Egglayer,	JUNIOR/SENIOR
S.L.A.D..A.S. 2."	BEST PLANT	JUNIOR/SENIOR
GILES CUP.	BEST HOME FURNISHED	JUNIOR/SENIOR
POND TROPHY.	BEST POND.	JUNIOR/SENIOR
MEMBERS .CHALLENGE TROPHY.	MEMBERS CHALLENGE.	SENIOR
ED NICHOLL CUP.	MEMBERS CHALLENGE.	JUNIOR
STAN HALSEY ROSE BOWL.	HIGHEST POINTED T/SHOW	JUNIOR/SENIOR
SOUTHCHURCH CUP.	HIGHEST POINTED T/SHOW _{R.U}	JUNIOR/SENIOR
ABBOT CUP.	HIGHEST POINTED T/SHOW	JUNIOR
BROOKS SHIELD 1.	BEST MINITANK	JUNIOR/SENIOR.
BROOKS SHIELD II	BEST MINITANK R.U..	JUNIOR/SENIOR.
HARD LUCK'- CUP.	BEST IN HARD LUCK	SENIOR
SOUTHEND SPORTS CENTRE CUP.	BEST IN HARD LUCK	JUNIOR
S.L.A.D.A.S. 3.	HIGHEST ;PTS OPEN SHOWS.	SENIOR CLASS
JONES CUP 1.	MEMBERS BEST FJSH.	SENIOR
S.L.A.D.A.S. 5.	MEMBERS BEST FJSH.	JUNIOR
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